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IMPERIAL MILITARY GEOGRAPHY

**“General Characteristics of the Empire
in Relation to Defence”**

BY

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NINTH EDITION

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PREFACE

THE primary aim of this book is to describe, in their geographical setting, the defence problems of the British Empire ; its secondary aim is to give a brief but adequate outline of the forces immediately available to bear the initial burden of these responsibilities, and also to take stock of the resources in man power and material which might ultimately be mobilized for National or Imperial needs. A stocktaking of this character, which shows both our responsibilities and our resources, is perhaps not inopportune at the present time when so many internal and external happenings and tendencies appear to threaten the future security of the Empire.

As a geographical study it must, of necessity, invade the provinces of political, economic and human geography. It aims at selecting from each those facts which are most relevant to the various problems of Imperial defence and examining and interpreting them from a strategic standpoint.

In the preparation of this edition, and of previous editions, I have received valuable advice and criticism, which I gratefully acknowledge, from many officers in the three services. My very sincere thanks are due to all these, and specially to Major-General R. H. Haining, C.B., D.S.O., Lieut.-Colonel F. H. Witts, D.S.O., M.C., The King's Own Royal Regiment, Lieut.-Colonel A. C. T. White, V.C., M.C., A.E.C., Lieut.-Colonel N. M. S. Irwin, D.S.O., M.C., The Border Regiment, Lieut.-Colonel K. N. Colvile, A.E.C., Lieut.-Colonel C. E. Hudson, V.C., D.S.O., M.C., K.O.S.B. To Major E. C. Priestley, O.B.E., A.E.C., in particular I owe a very great debt of gratitude for his kindness in reading and correcting the proofs of this edition.

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Peshawar,

April, 1937.

CHAPTER I

THE PROBLEMS OF IMPERIAL DEFENCE

THE fundamental fact with regard to the British Empire is its maritime nature. It is so dispersed round the oceans of the world and so largely composed of islands and peninsulas that the sea is the natural highway for its communications. Some 80,000 miles of essential sea routes separate its most important parts. Further, though it occupies 13·4 million square miles, out of the 54 million square miles of land on the globe, its territory is so discontinuous that nowhere, except in the British corridor along the eastern side of Africa, is there an opportunity for the development of inter-colonial land or air routes which would not cross foreign countries.

Relative to the three great oceans its territory is distributed as follows :—

<i>With coastlines on</i>	<i>Area (sq. miles)</i>	<i>Total pop'n. (millions)</i>	<i>White pop'n. (millions)</i>
The Atlantic Ocean	5,400,000	95	62
The Indian Ocean	8,400,000	400	8
The Pacific Ocean	7,100,000	20	18

(Total population, 491 millions : Total white population 72½ millions.)

Approximately two-thirds, therefore, of the whole area and four-fifths of the population lie in the arch of British territory round the Indian Ocean ; round the Pacific is more than half the area but only one-twenty-fifth of the population ; and six-sevenths of the white population live in lands with coastlines on the Atlantic. These figures emphasize (1) the importance of the Indian Ocean as the region where a large part of the Empire is situated, (2) the comparatively unpopulated state of our lands round the Pacific, (3) the concentration of white man power round the Atlantic and (4) the implied necessity for secure communications between these several areas.

*Land
frontiers*

Though the Empire is predominantly oceanic in nature its land contacts are numerous and important. It has, in all, some 20,000 miles of land frontiers with foreign countries, of which the longest continuous stretches are : India and Burma (5,000 miles) ; East Africa from the Sudan to South Africa (6,000 miles) ; Canada (3,500 miles). Only in the case of Canada, however, has it a land frontier with the home territory of a first-class Power. Elsewhere its territory adjoins the overseas colonies of other countries or else is contiguous to lands such as Spain, Saudi Arabia, Iran, Afghanistan, Tibet, Siam and China, which are not, at present, in the first rank as military Powers. This does not imply that there are no problems of frontier defence. On the contrary, such do exist, particularly in those lands which form the upper part of the arch of the Indian Ocean, and they vary in magnitude from the minor tasks of Imperial policing to the major responsibility of defence against attack by a considerable force. Further, two of our Imperial naval bases, Gibraltar and Hong-Kong, have land frontiers with foreign countries.

*Foreign
interests*

It is evident also that the wide dispersion and the great area of the Empire imply a multitude of contacts, political, social and economic, with the other countries of the world. In trade alone, the importance of these contacts is obvious. The trade of Great Britain with foreign lands is about half of her total external trade, and nearly half of her overseas investments are outside the British Empire. Canada, by force of geographical circumstances, has her chief economic contacts with the United States, and the other Dominions have large and increasing volumes of trade with foreign countries. From the standpoint of defence, our interests in foreign lands are no less evident. The Suez Canal, the Anglo-Iran and Iraq oilfields, our air route through the Middle East are only a few of the interests of this type. Indeed, so world wide is the Empire that it is involved directly or indirectly in every threat to peace throughout the world.

*Great Britain
a European
Power*

As regards Great Britain itself, the English Channel and North Sea are too narrow for isolation from the continent of Europe. Our contacts with that continent are innumerable, and from it alone could come the most serious dangers to the security of this island. Hence, European problems must

THE PROBLEMS OF IMPERIAL DEFENCE 3

loom large in any consideration of the problems of Imperial defence.

These problems are as follows :—

1. *The defence of sea communications.* The primary responsibility on which everything else depends, and which varies in degree from the constant necessity for policing the seas, preventing piracy, etc., to the major problems of defending our vital sea and ocean routes against attack by a great naval Power. *Problems of defence*
2. *The defence of land and air frontiers,* a problem which, likewise, extends in an ascending scale of seriousness from the policing of disturbed frontier tracts to the defence of important areas against invasion or air attack.
3. *The defence of important British interests in foreign lands,* such as the protection of the Suez Canal, of the air route to the East, of the Anglo-Iran oilfields and of our important trade interests in China.
4. *Our treaty commitments and obligations* which arise partly from (3), and may involve us in military intervention in Europe or elsewhere.
5. *The maintenance of internal security* within the Empire, and particularly in those countries where racial, religious or political antagonisms are likely to lead to civil disturbances.

Primarily, the Defence Forces of the Empire bear the burden of discharging these responsibilities. But their success depends not merely on the efficiency of the forces themselves, but also on a great variety of factors of a geographical, political and economic nature which will help or hinder them in their task. Thus, for instance, the political framework of the Empire, and the means for ensuring co-operation and unity of action in the face of a common danger are clearly political factors on which a successful issue largely depends. The potential resources of man power, for the reinforcement of the fighting forces and for the whole structure of industrial and agricultural production, the qualities of this man power, its distribution, its availability, are also matters of importance, for on these resources depend the ultimate national effort. Similarly, the material resources of the Empire, which

are the foundation of production in time of war must be considered, weaknesses noted, and the situation, defensibility and value of the sources understood. Further, the geography of lines of communication by sea, land, air, cable and wireless is of vital interest and importance, because these are the arteries and nerves of the Empire. The question of liability to external attack must lead to a consideration of the coasts, land frontiers and vital centres, and, also, of the conditions which exist in neighbouring foreign countries. Internal security problems, serious in time of peace because of the loss of life and destruction of property which they may involve, are doubly dangerous in war when they can create situations which may be disastrous. Hence, the causes of internal strife, possible solutions, and preventive measures which can be applied, are matters which require study. And, lastly, the treaty relationships between Great Britain and other countries must be understood, for some of these include definite military obligations.

Much emphasis will therefore be laid in the succeeding chapters of this book on these various factors which, in the aggregate, form what can be termed "Military Geography."

CHAPTER II

THE POLITICAL ORGANIZATION OF THE EMPIRE

OF the total area of the British Empire, seven million square miles are occupied by Great Britain and the Dominions, Canada, Australia, New Zealand, the Union of South Africa, Newfoundland¹ and the Irish Free State, seven self-governing States, inhabited chiefly—except in the case of the Union of South Africa—by white peoples and situated mainly in the temperate regions. The remaining six million square miles are situated almost entirely in tropical or sub-tropical regions, and are chiefly inhabited by coloured peoples in a lower stage of social and political development. They are not yet entrusted with their own government, but are directly or indirectly under the control of Great Britain or, in a few instances, of Australia, New Zealand or the Union of South Africa. These dependencies are classified under various terms, which will be explained later, such as Colonies, Protectorates, Mandates, and so forth, in accordance with their several forms of administration and relationship to the political framework of the British Empire. In general, however, they may be regarded as “minors” or “wards,” not yet capable of bearing the full responsibility for their own government, but requiring guardianship and control from without. (The control exercised over those dependencies implies not exploitation but just administration, a full recognition of native interests and a responsibility for training these peoples to take an increasing share in their own government.) Taken together, they can be regarded as forming a “Dependent Empire,” in contrast to the self-governing communities of the British Commonwealth of Nations.

THE DOMINIONS

The governments of the six Dominions are described in

¹ For temporary suspension of self-governing status in the case of Newfoundland see page 217.

Appendix II. It is sufficient for the present purpose to point out that, with the exception of the government of the Irish Free State which presents unique features, they are similar in three respects :—

(1) The head of the Executive and representative of the Crown, known as the Governor-General—except in Newfoundland where he is styled the Governor—possesses the prerogatives of the Crown in England pertaining to the executive, including the prerogative of mercy, but excepting those which are retained by the Crown—the right to declare war, and to confer honours. Just as the King in Great Britain acts on the advice of his ministers who are responsible to Parliament, so the Governor-General of a Dominion acts on the advice of the ministers of that Dominion. He is appointed by the sovereign on the advice of the Dominion government concerned, ordinarily for five or six years.

(2) Each has a parliamentary system in most respects similar to that of Great Britain. There are two Houses of Parliament. In Canada the Lower House is styled the House of Commons ; in Australia and New Zealand it is called the House of Representatives, and in other Dominions the Legislative Assembly, or House of Assembly. The Upper Chamber bears normally the title of the Senate.

The Lower Houses are essentially democratic and are elected on wide franchises. The Upper Houses of Australia and Newfoundland are elected ; in New Zealand its members are nominated, though provision has been made for an elected House in the future. In Canada members are nominated for life by the Governor-General, or in effect by the Government in power in the Dominion. In the Union of South Africa four-fifths of them are elected by the Provincial Councils, and one-fifth nominated in order to secure representation of native interests.

The privileges and customs of the Parliaments of the Dominions are closely modelled on the British Parliament. Money bills must originate in the Lower House, and can be rejected but not altered by the Upper House. All bills passed by the legislatures of the Dominions are worded in the name of the King, and must be signed by the

POLITICAL ORGANIZATION OF THE EMPIRE 7

Governor-General as his representative before they take effect.

(3) The third essential common to all is a Cabinet system as in Great Britain.

In the Irish Free State legislation has now produced a unique system. The office of Governor-General has been abolished, bills are signed by the Speaker of the Dail, and the Sovereign is regarded only as the means, common to all members of the British Commonwealth, by which the relations with foreign states are maintained, *i.e.*, for the appointment of diplomatic and consular representatives and the making of treaties. Internally the Crown does not now appear in the constitution and is merely used for the purpose of external association. *The Irish Free State*

THE DEPENDENT EMPIRE

The colonies of the Empire also have certain general characteristics in common. *Colonies*

(1) The relations of all of them with the British Government, through the Colonial Office, are extremely close. The Governor and the principal public officers are appointed by the British Government, which also possesses and exercises, through the Colonial Office, a large measure of control over legislation and administration.

(2) The Governor has almost complete executive power in a colony, and his assent is necessary to all legislation which is passed locally. He is bound only by regulations formulated by the Colonial Office.

(3) The Governor is assisted and advised in each colony by an Executive Council consisting of the chief officers of the local government and, in certain cases, of additional unofficial members nominated by him.

(4) Each colony, with the exception of those whose legislative power is vested completely in the Governor, has a Legislature, which may consist of one Chamber, known as the Legislative Council, or of two Chambers in the more advanced colonies, a Legislative Council and an Elected Representative Assembly.

Within this general framework there is, however, a great

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variety in detail in accordance with the amount of local power exercised by each individual colony. Thus :—

A.—At the top of the scale are (1) Southern Rhodesia,¹ which possesses responsible self-government subject to certain exceptions, with regard to native administration, etc., and (2) Ceylon where local bodies have control of all subjects except defence, foreign affairs and justice, subject to emergency powers possessed by the Governor.

B.—A little lower in the scale are those colonies which possess both a Legislative Council (nominated) and an elected House of Assembly. The only representatives of this type are Barbados, the Bahamas and Bermuda.

C.—Lower still are colonies which possess no elected House of Assembly, but have only a Governor, Executive Council and Legislative Council. This is the most common type, and can be subdivided into three classes :—

(a) Those where the Legislative Council is partly elected, and the officials on it are not in the majority, *e.g.*, British Guiana.

(b) Those where the Legislative Council is partly elected, but an official majority is assured, *e.g.*, Jamaica, Kenya, Mauritius.

(c) Those where the Legislative Council is nominated by the Crown, *e.g.*, British Honduras, Hong-Kong.

D.—Lowest of all are those colonies which are administered by a Governor and Executive Council only and in which there is no Legislative Council, *e.g.*, Ashanti, Gibraltar, St. Helena.

Protectorates “The essential characteristic of Protectorates is that the Crown assumes and exercises full sovereign authority, though without annexing the territories.” The territory of a Protectorate, unlike that of a colony, is not British soil, and its inhabitants are not British subjects, though they are British

¹ Southern Rhodesia has almost Dominion Status ; was represented at the Imperial Conference at Ottawa, and the departmental link with Great Britain is the Dominions Office and not the Colonial Office. The Statute of Westminster does not apply to it, however, and the Crown can legislate for it in certain cases. In practice, this has not been done.

protected persons and, as such, entitled to British diplomatic protection when in foreign countries. In protectorates the principle of "indirect rule" through local chiefs or rulers, subject to British supervision and advice, is applied to an extent suitable to local circumstances. Thus, considerable authority is exercised in Uganda by the Kabaka of Uganda, and in Northern Nigeria by the Emirs, for well developed local institutions exist, but in other Protectorates such as the Protectorate of Kenya the powers in the hands of the local chiefs are extremely small.

Protected States are territories in which the sovereign authority belongs to the ruler and not in any sense to the British Crown, which has, however, by treaty agreements, powers and duties in respect of internal and external affairs, particularly the latter. The Indian States; the Federated and Unfederated Malay States; British North Borneo (in which the ruling authority is the British North Borneo Company); Sarawak (where the hereditary ruler is a member of the Brooke family) and Tonga are examples of Protected States.

As in the case of Protectorates, the inhabitants of Protected States are not British subjects, and the local rulers are generally assisted by British Advisors or Residents.

The term Mandate, as now used, had its origin in the treaties at the end of the Great War, in which were ceded to the Allied and Associated Powers all the German colonies and the Arab provinces of the Ottoman Empire. The Covenant of the League of Nations states that these territories should be put under the care of "advanced nations who, by reason of their resources, their experience, or their geographical position, can best undertake this responsibility." These nations act as trustees on behalf of the League, are expected to aim at developing the well-being of the peoples under their care, without seeking special economic or strategic advantages and they render to the Council of the League of Nations an annual report on the territory committed to their charge, which is examined and reported on by a Permanent Mandates Commission of the League.

Such mandated territories fall into three classes.

Class A is composed of communities detached from the Turkish Empire and declared to have "reached a stage of

development where their existence as independent nations can be provisionally recognized, subject to the rendering of administrative advice and assistance by a mandatory until such time as they are able to stand alone." The only examples of this type are: Palestine, mandated to Great Britain; Syria including Lebanon, mandated to France.¹ Equal opportunity for trade and commerce to all members of the League is provided for.

Class B consists of communities less able to stand alone and comprises all the former German colonies in Africa, except South West Africa. These are administered by the Mandatory Powers under conditions which guarantee freedom of conscience and religion, which prohibit social abuses such as the slave trade and liquor traffic, and which permit equal opportunities for trade and commerce in the Mandate to all members of the League. No military training of the natives, for other than police purposes or for the maintenance of public order and the defence of the territory, is permitted, nor can naval bases or other fortifications be established within it.

Togoland and the Cameroons, mandated partly to France and partly to Great Britain, the north-western portion of German East Africa (Ruanda and Urundi) mandated to Belgium and the remainder of German East Africa mandated to Great Britain, belong to this class.

Class C, consisting of German South West Africa and the German possessions in the Pacific, is composed of countries which, owing to sparseness of population, small size, remoteness from centres of civilization or geographical contiguity, "can best be administered under the laws of the mandatory as integral portions of its territory, subject to the safeguards above mentioned in the interests of the native population."

Mandates in this class are subject to the same regulations as those in Class B, except that the Mandatory Power is not obliged to provide equal opportunity for the trade and commerce of other members of the League.

They comprise the former German South Pacific possessions (except Nauru and Samoa) mandated to Australia; Western

¹ This mandate is now being terminated, in accordance with a Treaty (1936) between France and Syria, and Syria is to receive independent status in 1939.

POLITICAL ORGANIZATION OF THE EMPIRE 11

Samoa mandated to New Zealand ; Nauru mandated to the British Empire, and administered by Australia, New Zealand and Great Britain ; former German North Pacific possessions mandated to Japan ; and German South West Africa mandated to the Union of South Africa.

INDIA

The government of India presents so many complex and unique features that a description of it must be postponed to a later chapter. To place it in this general framework, it is sufficient to state here that the new constitution which is to come into operation shortly will be a Federation of self-governing Provinces and Indian States, the whole possessing responsible government, except in relation to certain reserved matters, such as the control of external relations and defence. India best fits into the framework as a region which is moving towards the attainment of full Dominion status, and which differs from all other Dependencies not merely in its political organization but also in the fact that it is represented at Imperial Conferences and at the League of Nations.

REGIONS NOT UNDER THE SOLE CONTROL OF GREAT BRITAIN

Of these, the Anglo-Egyptian Sudan is the most important. *Condominiums*
By the Anglo-Egyptian Treaty of 1936 the full condominium status of the Sudan, agreed to by a Convention in 1899 and suspended in practice in 1924 has been resumed. The flags of both Great Britain and Egypt fly in the Sudan ; the Governor-General is appointed by the King of Egypt on the recommendation of the British Government, and both British and Egyptian troops and civil servants can be stationed there.

The New Hebrides which have been administered jointly by French and British officials since 1906 are the only other example of a Condominium.

Concessions, in China, are areas set apart for foreign trade and residence and leased to Britain or other powers by the Chinese Government for an annual land tax or rent. *Concessions and Settlements*
The only British concessions which now remain are those at Canton (Shameen), Chinkiang, Newchwang and Tientsin. Settlements, on the other hand, are areas where the land is

leased from private Chinese landowners, the leases being registered by the Chinese authorities and subject to a tax. The British share in the International Settlement at Shanghai is the only British example now existing. Local administration in the concessions is generally carried out by the British consuls; in Shanghai a municipal council elected by the ratepayers is the governing body. But the final sovereignty over these regions has never been relinquished by the Chinese government, though in practice China exercises no powers within them.

*Spheres of
Influence*

British spheres of influence are regions which are not necessarily controlled at all, but in which Great Britain reserves the exclusive right of intervention as against any other power. Arabia, the Persian Gulf and the isthmus connecting the Malay Peninsula with Siam are illustrations. The unspecified reserved areas mentioned by Great Britain in the negotiations preliminary to the signing of the Kellogg Pact are also a species of sphere of influence.

THE MEANING OF DOMINION STATUS

In subsequent pages the phrase "Dominion Status" frequently appears, and it is desirable therefore to attempt here a description of what it implies to-day. It is not merely the present status under which one-third of the white population of the Empire lives but is also the goal to which India is regarded to be progressing.

After the War it became increasingly evident that the practice with regard to the relationship between the Dominions and Great Britain had outgrown and was at variance with constitutional theory. Theoretically, in certain respects, the Dominions were subordinate to the British Government. The legislation of a Dominion Government, in theory, could be vetoed or disallowed by the Imperial Government. In practice, however, such action would never be contemplated and the Dominions were, in actual fact, self-governing communities, equal in status to Great Britain as members of the British Commonwealth of Nations.

It was considered desirable to define the situation clearly by putting on record the status to which they had attained. Accordingly an "Inter-Imperial Relations Committee" of the

Imperial Conference of 1926, under the chairmanship of Lord Balfour, examined and defined the relations between Great Britain and the Dominions, and crystallized Dominion status in the following historic definition which was subsequently accepted by the whole Conference and by the governments of the Empire.

"Great Britain and the Dominions are autonomous communities within the British Empire, equal in status, in no way subordinate to one another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown, and freely associated as members of the British Commonwealth of Nations."

In this definition of status three principles were affirmed :—

- (a) The absolute equality of the various self-governing nations of the Empire in a partnership known as the British Commonwealth of Nations.
- (b) The complete power of each in respect of its internal and external affairs.
- (c) Their unity under the Crown, which is the constitutional link uniting them.

These principles were not new. They had been assumed for some years, but their definition in clear language opened the ground for the consideration of constitutional anachronisms, such as the position of the Governors-General in relation to the British Government, the powers of veto or disallowance of Dominion legislation, the responsibility for foreign relations, and the methods of co-operation between the self-governing units of the Empire.

First, a modification in the King's title was obviously necessary. The existing title "George V, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the seas, King, Defender of the Faith, Emperor of India," was no longer accurate in view of the Dominion status of the Irish Free State. The following modification was therefore adopted :—"of Great Britain, Ireland, and the Dominions beyond the Seas, King, etc.," and the necessary change was made later by Act of Parliament in 1927.

(2, *The
Position of
the Governor-
General*

The position of the Governor-General as the representative of the Crown in a Dominion was reaffirmed. In view, however, of the absolute equality of the Dominions and Great Britain, it was recommended that his previous function as an intermediary of the British Government should completely disappear, and that the Governments of Dominions and Great Britain should communicate with one another direct. The Governor-General of a Dominion therefore, when discussing affairs with his ministers, would be in precisely the same position as the King, able to give the unbiassed opinion which is the result of his wide experience of affairs, but would be in no sense the mouthpiece of the British Government. Communications between the British Government and the Government of a Dominion should be direct between ministers of the two governments and a copy should be sent to the Governor-General. This procedure is now carried out between Great Britain and the governments of Canada, Australia, and the Union of South Africa.

(3) *Powers
of disallow-
ance and
reservation*

The powers of veto, disallowance and reservation with regard to Dominion legislation, which in practice had fallen into disuse, were also reviewed. It was recommended that, on matters of ordinary legislation, the power of the British Government to disallow any legislation of a Dominion should no longer be considered to exist; but it was felt that with regard to matters dealing with alterations in the constitutions of Dominions, or reservations embodied in Acts to safeguard interests common to the whole British Commonwealth, it would be dangerous to move hastily. The Conference therefore agreed that these questions should be more fully considered by a Committee, which met and reported to the Imperial Conference of 1930. As a result of its report important recommendations were made by this Conference. It was agreed that the appointments of Governors-General should be made by the King on the advice of the Dominion Governments concerned, and not on the advice of the British Government as previously. It was recommended that, in future, disputes capable of legal settlement between governments of the British Commonwealth should be submitted to *ad hoc* tribunals set up for their settlement, the personnel of these tribunals being selected from standing panels nominated

by the several members of the Empire, and not to the Judicial Committee of the Privy Council, as previously. Finally, the powers of disallowance and veto of Dominion legislation, and the limitations on the operation of such legislation were the subject of resolutions which were subsequently embodied in the Statute of Westminster in December, 1931.

This constitutional landmark granted to Dominions the power, not previously held, to make laws having extra-territorial operation, viz., laws controlling their own subjects when outside the Dominion, as on merchant ships. It enacted that the Colonial Laws Validity Act, 1865, by which a Dominion law, if repugnant to a provision of a British Act extending to that Dominion, was void to the extent to which it was repugnant, should no longer apply. It removed from the Parliament at Westminster the power to legislate for any Dominion except at the request of the Dominion. But at the same time, in the Preamble, it emphasized in a striking way the importance of the Crown as the binding link and affirmed that "any alteration in the law touching the succession to the throne or the Royal Style and Titles shall hereafter require the assent as well of the Parliaments of the Dominions as of the Parliament of the United Kingdom."

*The Statute of
Westminster*

It should be added also that Canada, Australia and New Zealand, had clauses inserted in the Statute designed to prevent these Dominions from repealing or making alterations in the constitutions which had been conferred on them by the British Parliament; while the Union of South Africa had a clause inserted that the safeguards for native rights and for the use of English and Dutch as official languages laid down in the South Africa Act of 1909 were not affected. Thus, while receiving beyond doubt equality of status with Great Britain, these Dominions both affirmed their unity under the Crown and acknowledged that the only title deeds and the very foundations of their status were in British Statutes. By self-denying ordinances they prevented the Statute of Westminster from giving them the power to make alterations in these Statutes.

Though, constitutionally and legally the full implications of Dominion Status are still vague, there is little doubt about

¹ This was carried out in connection with the abdication of King Edward VIII.

its meaning in practice. It means unfettered self-government except where the Dominions have limited their own powers. It means that the British Commonwealth is composed of seven free and independent nations, between whom the sole constitutional bond is the Crown and who are guided in their relationships mainly by two considerations, "In principle, unrestrained freedom of action to each individual member of the Commonwealth: in practice, consultation with a view to co-operative action wherever possible."¹

*Imperial
Conferences*

CONSULTATION AND CO-OPERATIVE ACTION

Of the various methods of consultation which now exist between the Dominions, Great Britain and India, the Imperial Conferences which are held every three or four years and are normally attended by the Prime Ministers of the various Dominions, and representatives of India, are much the most important. Though these Conferences are merely consultative and their agreements are not binding on the various countries represented, until passed by their several Parliaments, the weight of their recommendations is always considerable and generally leads to appropriate action. Throughout their history, from the first held in 1911, they have largely guided the relations between Britain and the Dominions and helped to solve by personal contact the problems which have arisen from the growth of political self-consciousness in each country. In the economic sphere, they have assisted in producing some measure of Imperial preference, in standardizing weights, measures, etc., in obtaining uniformity of shipping legislation, and in removing the burden of double income tax. Imperial communications, civil aviation, overseas settlement, forestry research, Imperial organization in the field of minerals, cotton growing in the Empire, petroleum production, the adequacy of existing steamship services, standardization of the form of Customs invoices and certificates, are only a few of the topics which have been considered. Their work in the spheres of defence and foreign policy has been no less varied and important. They have been the prime mover in the establishment of many co-operative agencies, such as the Imperial Economic and

¹ Dr. Hertzog at Imperial Conference, 1926.

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Shipping Committees. In short "they have gradually built up a whole network of contacts, extending throughout the entire fabric of our respective national organizations, official and unofficial. . . . This network extends from the Crown which unites all by a common bond, through the whole range of government activities, justice, foreign policy, defence, trade, communications, migration, education and so forth and is completed by a thousand social links—of race, language, science, literature, drama, sport."¹

But the Conferences meet only at long intervals, and must be supplemented by a regular interchange of information. This interchange now takes place direct by letter, cable and wireless, between the various governments, and also through the Secretariat of State for Dominion affairs, formed in 1925, which provides a useful link and deals with all business relating to Imperial Conferences. Further, each Dominion is represented in London by a High Commissioner whose status approaches that of an Ambassador, while the British Government is now represented in Dominions by similar officials. The States of Australia and the Provinces of Canada each have an Agent-General in London as a business link to deal with commercial affairs, publicity and migration. In addition to these there are the various consultative agencies for foreign policy and defence which are so important that they will be referred to in more detail in subsequent sections. To these might be added the fact that the British Consular Service looks after the interests of Dominions, as well as of Great Britain, in foreign cities and ports.

IMPERIAL CO-OPERATION IN FOREIGN POLICY

The question of co-operation in foreign policy between Great Britain and the self-governing communities did not arise until a few years before the war. Until then, the Dominions were fully occupied with the development of their own vast territories, and had neither the time nor inclination for the wider affairs of the world around them. They were generally content, therefore, to leave the control of Imperial Foreign Policy completely in the hands of Great Britain, and to subscribe to anything which the British Government should propose.

¹ Mr. Stanley Baldwin at Imperial Conference, 1926.

In the years immediately before the war, however, a new precedent was established. The Premiers who were present at the Imperial Conference in 1911 attended meetings of the Committee of Imperial Defence, at which the principles of British Foreign Policy were explained. The German menace was discussed, and the approval of the Dominions sought and given to the renewal of the Anglo-Japanese Alliance. The Imperial Government thus initiated a new principle of consultation with the Dominions on questions of general foreign policy. Despite this precedent, however, the declaration of war in 1914 was made on the responsibility of the Imperial Government alone, though it was approved of immediately afterwards by the various Dominions.

Before the negotiations for peace, a tendency towards fuller Dominion representation in general foreign policy was evident. They naturally desired some voice at the Peace Conference commensurate with their war services, and a compromise was arrived at by which they were accorded the right of separate representation, so that they could present their views, though in any case of voting only one joint vote might be given on behalf of the British Empire.

This tendency was further confirmed by the League of Nations, of which the Dominions (except Newfoundland) and India became members, and mandates for the German territories in South West Africa, New Guinea and Western Samoa were given to the Union of South Africa, the Commonwealth of Australia, and New Zealand respectively. The Dominions, therefore, obtained the right to communicate direct, and not through the Imperial Government, with the League of Nations, to whom they are responsible in carrying out their mandates, and to whom they must render annual reports.

Another development after the war was the appointment of diplomatic representatives of Dominions to foreign courts. The number of such representatives has gradually increased and to-day there are Canadian Legations in Washington, Paris and Tokyo; Irish Legations in Washington, Paris, Berlin and the Vatican; and South African Legations in Washington, Rome and The Hague.¹ Australia has appointed

¹ And also at Paris, Berlin, Brussels, Lisbon and Stockholm

attachés to various British embassies, but otherwise is not represented abroad.

Thus, the tendency in the years since the war has been to recognize the rights of the Dominions to be consulted on matters of Foreign Policy, and to realize that they are in no sense bound by decisions arrived at by the British Government to which they have not actually given their assent. This stage in our Imperial organization was explicitly stated in the following resolution of the Imperial Conference of 1923 :—

“ Foreign Relations.—The Conference agreed that it is desirable that no treaty should be negotiated by any of the Governments of the Empire without due consideration of its possible effect on other parts of the Empire, or on the Empire as a whole. Steps should be taken therefore to ensure that all the Governments of the Empire likely to be interested should be kept informed and should have an opportunity of expressing their views and participating in the negotiations. ” *Imperial Conference 1923*

“ A treaty imposing obligations on one part of the Empire only should be signed by a representative of the Government of that part, and should clearly indicate the part of the Empire in respect of which the obligations are to be undertaken. Where a treaty imposes obligations on more than one part of the Empire, the treaty should be signed by one or more plenipotentiaries on behalf of all the Governments concerned. As regards treaties negotiated at International Conferences, the existing practice of signature by plenipotentiaries on behalf of all the Governments of the Empire represented at the Conference should be continued.”

This resolution was reaffirmed and elaborated by the Imperial Relations Committee at the Imperial Conference of 1926. The Committee went on to apply the underlying principles of the Resolution of 1923 to the conduct of foreign policy within the Empire generally. “ It was frankly recognized that in this sphere, as in the sphere of defence, the major share of responsibility rests now, and must for some time continue to rest with His Majesty’s Government in Great Britain. Nevertheless, practically all the Dominions are engaged to some extent, and some to a considerable extent, in the conduct of foreign relations, particularly those with foreign countries on their borders. . . . We felt that the ” *Imperial Conference of 1926*

governing consideration underlying all discussions of this problem must be that neither Great Britain nor the Dominions could be committed to the acceptance of active obligations except with the definite assent of their own governments."

*Necessity for
Constant
Consultation*

Foreign Policy, is, however, a branch of the activities of government which has a habit of suddenly taking strange and ominous turnings. The crux of the whole matter therefore lies in the italicized lines of the resolution quoted above. Continuous and not occasional consultation between the Governments of the Empire is essential if the Empire is to speak with one voice: if it speaks with many and contradictory voices on questions of Foreign Policy, its security is seriously impaired.

Unfortunately, the difficulties in the way of continuous consultation between the Governments of the Empire are great and obvious. Distance is the greatest. Imperial conferences cannot be held frequently, because the Prime Ministers of the various Dominions cannot spare the time to come to this country. Communication by letter or cable is less satisfactory than an opportunity to talk matters over and smooth out difficulties in conversation. Here, it is true, the development of wireless and of air routes helps, in that they enable the Premiers of various parts of the Empire to talk across the intervening distance, or to visit one another more quickly than in the past. But these are only palliatives and not a cure, and various efforts have therefore been made during the last few years to increase the number of means by which the Dominions can be kept continuously informed of the trend of Foreign Policy.

*New Means
of co-ordina-
tion*

Thus the formation in 1925 of the Secretariat for Dominion Affairs was partly dictated by the necessity for closer touch between the various self-governing units of the Empire. Further, Australia, in 1924, appointed a Liaison Officer in London to study the foreign situation and supply the Prime Minister of the Commonwealth with any necessary information to supplement that received through existing channels. After the Imperial Conference of 1926 this method was extended. The British Government appointed a High Commissioner in Canada (1928) and later a High Commissioner in South Africa (1930), to perform the function of an additional channel of information. At the request of New Zealand, an officer of

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the Foreign Office was seconded for attachment to the Department of the Prime Minister of New Zealand in an informative and consultative character, particularly in relation to Foreign Affairs. Arrangements were initiated also whereby the Imperial Secretary in South Africa would act as a supplementary channel of communication between His Majesty's Government in the United Kingdom and in the Union of South Africa.

The Conference of 1930 considered reports on the working of these various methods of liaison and expressed itself as being "impressed with the desirability of continuing to develop the system of personal contacts between His Majesty's Governments," though it recognized the right of the various governments to adopt their own arrangements for this purpose. It also reaffirmed a resolution of the Conference of 1926 in which it was stated that where Dominion governments had no representatives at foreign courts "the existing diplomatic channels should continue to be used," viz., the British Ambassador or Minister should act not merely for the British Government but for Dominion Governments as well. In such cases "it would be understood that the communication sent to him" (by the Dominion Government) "would indicate to him that if practicable he should, before taking action, await a telegram from His Majesty's Government in the United Kingdom with whom the Dominion Government concerned would simultaneously communicate."

Treaty obligations form part of the Defence Responsibilities of the Empire. It is therefore important to understand how the Dominions stand at present with regard to those major commitments which Britain has signed since the war. The first of these was the Covenant of the League, to which the Dominions equally adhere with Great Britain to fulfil the obligations of that Covenant. The second was the Locarno Treaty of Mutual Guarantee, in which Great Britain, Germany, France, Italy and Belgium, as a group and individually, guaranteed the present German frontiers of France and Belgium. At the Imperial Conference of 1926 the Dominions gave a general approval to this Treaty, but none of them were signatories to it, and indeed Article 9 relieved them of any obligation. Another is the Anglo-Iraqi Treaty of Alliance and Amity

*The position
with regard
to Treaty
Responsibilities*

(1930) which binds Great Britain and Iraq in a strict compact to come to one another's assistance in case of either being attacked. The Dominions are not parties to this Treaty, or to the Anglo-Egyptian Treaty of 1936 which involves commitments of a similar nature. And, finally, there is the important reservation made by the British Government when signing the Kellogg Pact, in which we reserved the right to take action in defence of our interests in "certain regions of the world the welfare and integrity of which constitute a special and vital interest for our peace and safety." All the Dominions were signatories of the Kellogg Pact, but Canada and the Irish Free State refused to be associated with this British reservation. It must not be assumed, however, that because the Dominions did not sign these important commitments they would therefore refuse to participate with Great Britain in their fulfilment. The extent of their action, under circumstances where a decision would have to be made, remains within their own initiative, and must be guided by public opinion in each of the Dominions, which are inclined against giving any guarantees in advance of participation in European or other commitments. But the many ties and contacts which exist must greatly weigh that opinion towards unity and co-operation in the face of danger to any part of the British Commonwealth of Nations.

*The bonds
of Union*

Of these ties, the only constitutional one which now remains unimpaired between Great Britain and the Dominions is the Crown, the symbol of union between all, and the means for preserving continuity in the governments of Great Britain and the Dominions. But the constitutional link is in fact the least powerful. Loyalty and affection for the Royal Family, the ties of common race, language and religion; a heritage of culture, tradition and literature common to all, and the multitude of social contacts which exist in every sphere are more potent guarantees of unity. Common interests, too, play a part, and the constant stress laid by Imperial Conferences on the necessity for a common economic policy, for unity of action in Foreign affairs, for devising means of consultation and co-operation, and for uniformity throughout the defence establishments of the Commonwealth

shows a recognition of the fact that "we must all hang together or we shall all hang separately."

The degree of participation in a war, in which Great Britain ^{Is} is involved, must, it has been seen, depend on the government ^{Neutrality} and people of each Dominion. ^{Possible?} Is it then possible, in an extreme case, for a Dominion to remain neutral while Great Britain is at war? To this question it can be replied that it would almost certainly entail secession. Apart from the obvious incongruity and difficulties of the King in Great Britain being at war while the King in the Dominion concerned was neutral, it is very doubtful whether foreign countries and particularly enemy countries could or would recognize such neutrality. Further, it is extremely improbable that Great Britain would engage in any war save one of self-defence, where its existence was threatened or one arising out of some wanton violation of the League Covenant, in which cases the support of the Dominions would not be wanting.

The matter is, however, not purely academic for it has been claimed in South Africa and the Irish Free State that Dominions can remain neutral when Great Britain is at war. If this were possible then the status of the naval base at Simons-town and of the various harbours which the treaty of 1921 allowed Great Britain to occupy in the Irish Free State would give rise to very difficult problems.

CHAPTER III

THE DEFENCE FORCES OF THE EMPIRE

IN the last chapter it was seen that the territories of the Empire fall broadly into three groups : (1) those in which the ultimate authority rests with the British Government, viz., Great Britain, the Colonies, Protectorates, British Mandates and the Anglo-Egyptian Sudan ; (2) the Dominions with their appendent territories and mandates, and (3) India which is in a stage of transition between (1) and (2).

It is within the power of the British Government to guide or control the foreign and defence policies of all the countries in the first group, and to determine the nature and extent of the action of these countries at any time. The forces of the Colonies, Protectorates and British Mandates are under Cabinet control through the Secretary of State for the Colonies ; and the forces of the Sudan can similarly be controlled through the Secretary of State for Foreign Affairs. Hence, in this group, the British Government is ultimately responsible for taking all appropriate measures for defence, and for ensuring such co-ordination and uniformity as is necessary, though in arriving at decisions it would naturally be guided by local advice and conditions.

The second group is composed of the Dominions, each of which has complete control over its own foreign policy and defence, can determine the nature and extent of its own action at any time, and is, in no way, bound by any decision of the British Government. Consequently, concerted action and uniformity between the various Dominion forces and those under British control can only be brought about by consultation and agreement. In the case of India, up to the present, the Secretary of State has been ultimately responsible for the direction and control of the Indian forces, though naturally he has been guided by advice from the Indian Government. In future, when the Federation of India comes into existence this ultimate responsibility will devolve on the Governor-General, as the representative of the King.

Subject, however, to these limitations, the generally

accepted principles which guide British and Dominion policy (and also the policy of the Indian Government) on the matter of defence are : (1) That each part is primarily responsible for its own local defence until assistance can reach it ; (2) hence, that a sufficient naval strength, compatible with Treaty agreements, and adequate naval bases and fuel and repair ports to ensure mobility must be maintained in order to secure the sea communications by which the trade and armed forces pass, and (3) that uniformity of organization, training and equipment in the defence forces of the Empire shall be practised as far as possible so that mutual assistance, when forthcoming, may be effective.

THE NAVAL FORCES OF THE EMPIRE

Though small naval forces were maintained by Australia *Dominion* prior to the year 1909, under the authority of a Colonial *Navies* Naval Defence Act of 1865, these forces were merely for local defence and were ultimately under the control of the British Admiralty. In general, the Dominions were content to make contributions in money towards the cost of naval defence. Local sentiment, however, gradually moved in Australia and Canada away from this method and towards the establishment of Dominion navies which should be under the full control of the Dominions concerned; and in 1909, the British Government summoned a Naval and Military Conference at which they accepted the principle of Dominion Navies. Two years later, the situation was more clearly defined in a Naval Agreement made between the United Kingdom and Canada and Australia, in which definite stations were allotted to the fleets of these Dominions and arrangements made for the interchange of officers, co-ordination in training and regulations for discipline. This agreement stated that "the Naval forces of the Dominions of Canada and Australia will be exclusively under the control of their respective governments" while within their stations, and that in time of war, "when the naval service of one of these Dominions is put at the disposal of the Imperial Government by the Dominion authorities, the ships will form an integral part of the British Fleet and remain under the control of the British Admiralty during the continuance of the war." It thus clearly acknowledged

the necessity for central control in war, but affirmed that this could only come about by the deliberate action of the Dominion governments concerned.

In 1913, New Zealand, which had for some years contributed generously to the cost of the Imperial Navy, fell in line with Canada and Australia and provided for the establishment of a New Zealand Naval Force, not however in this case as a separate navy but as a squadron of the Royal Navy. Later still (1921), the Union of South Africa took over the control of the Royal Naval Dockyard and Base at Simonstown together with all the coastal defences of the Union, and passed legislation allowing for the formation of a nucleus of a small naval service. In the case of the Irish Free State the treaty granting Dominion status to that country (1922) reserved to the Imperial Government the defence by sea of Great Britain and Ireland "until an arrangement has been made between the British and Irish Governments whereby the Irish Free State undertakes her own coastal defence." And finally, in 1926, the Indian Government, which had previously contributed about £100,000 a year to the upkeep of the Royal Navy and had also maintained the Royal Indian Marine, proposed to reorganize the latter as a combatant force, under the title of the Royal Indian Navy, which should be responsible for Indian coastal defence, should assist the Royal Navy in patrolling the Persian Gulf and should, in time of war, come automatically under the control of the Naval Commander-in-Chief, East Indies Station. This proposal was later carried into effect.

*The Royal
Indian
Navy*

Stress has necessarily been laid in the preceding paragraphs on the local nature and local control of Dominion Navies, but this must be qualified by other important facts such as the following. The naval bases and defended ports maintained by the Dominion governments are available for the use of the Royal Navy as well as of the Dominion Navies. Dominion naval officers on appointment generally carry out their early training on ships of the Royal Navy and later are employed alternately in Royal Naval and Dominion appointments, thus ensuring uniformity in outlook and methods. New Zealand has contributed to the construction of the Imperial Naval Base at Singapore. And finally, though the incorpora-

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tion of the naval service of a Dominion into the Imperial Navy in time of war must come by the voluntary act of the Dominion, a recognition that this voluntary act would normally take place was implicit in the Washington and London Treaties which included the Dominion Navies in the Imperial Navy for the purpose of naval limitation.

The strength and distribution of the Royal Navy will be described in Chapter VI. Its predominant share in the burden of the maritime defence of the Empire is shown by the following table:

JANUARY 1937

Navy	Bases	Battle-ships and Battle-cruisers	Cruisers	Aircraft Carriers	Fleet Leaders and Destroyers	Submarines
Royal Navy ..		15	47	7	146	54
Royal Australian Navy	Sydney	—	4	1	11	—
Royal Canadian Navy	Halifax and Esquimalt	—	—	—	4	—
Union of S.A. Naval Service	Simonstown	—	—	—	—	—
The New Zealand Squadron	Auckland	—	2	—	—	—
The Royal Indian Navy	Bombay	—	—	—	—	—
Total		15	53	8	161	54

THE LAND FORCES OF THE EMPIRE

To discharge its primary responsibility for local defence, each Dominion, except Newfoundland, maintains a land force which, except in the case of the Irish Free State, consists of a very small permanent force, chiefly for administrative, instructional and coast defence purposes, supplemented by a Citizen Force, corresponding in a general way to our Territorial Army, and by Reserves and subsidiary organizations, such as Cadet Corps and Officers Training Corps. The citizen forces in the case of the Union of South Africa are formed on a system of compulsory training; in Canada, Australia and New Zealand by voluntary systems; and they, together with the Reserves and subsidiary organizations, are the basis for expansion in a national war effort. The system of the Irish Free State combines in one force the principles of long and short service, viz., service with the colours can range from three months to two years.

As the primary onus of local defence is accepted by each Dominion, no British troops are now stationed in any, except in certain coast defences near harbours of the Irish Free State

where the right to retain them for Imperial purposes was specifically agreed to by the Treaty of 1922. Nor, on the other hand, do the Dominions maintain any troops for purposes other than local defence. Thus, the terms of service of the Canadian forces are confined to the defence of Canada, though not necessarily *in* Canada; of New Zealand forces to the defence of New Zealand in New Zealand; of the Australian forces to the defence of Australia in Australia; and of the South African forces to the defence of the Union of South Africa in South Africa. Special legislation would therefore be necessary in these Dominions before their forces could be made available as a whole for Imperial purposes, though individual members may volunteer for service of that nature.

The strength of these land forces was as follows, in 1937 :—

	<i>Permanent Force</i>	<i>Citizen Force</i>
Canada	3,800	134,000
Australia	1,600	30,000
New Zealand	600	12,000
Union of South Africa ..	4,000	9,000
Irish Free State ..	6,000	—

*Indian
Forces*

India, by reason of its unique problems of internal security and external defence, has the largest concentration of military force in the Empire, though if populations are compared, the total military strength which it supports per head of the population is only one-third of that supported by the inhabitants of Great Britain.

Its military forces consisted of the following in 1937 :—

<i>Permanent Forces :</i>	<i>Strength</i>
1. The British Army in India	57,000
2. The Indian Army	159,000
3. Indian State Forces	44,000
4. Military Police and Levies	28,000
<i>Non-permanent Forces :</i>	
5. Indian Army Reserve and Supplementary Reserve	39,000
6. Auxiliary Force in India (British)	34,000
7. Indian Territorial Force	19,000

The situation with regard to the use of (2) outside India¹ will be explained in a later chapter. At present, Indian units are,

¹ See page 355.

in fact, part of the normal establishment in Malaya, Burma and Hong-Kong. The Indian State Forces are raised and maintained by ruling princes at their own expense for State service, and, though they are organized on the Regular Indian Army system, and all possess British military advisors to assist in matters of organization and training, these forces cannot be used outside their State boundaries without the assent of the Indian rulers concerned. It may be added, however, that the offer of their assistance has been invariably made in past crises.

Military forces are maintained in the various Colonies, Protectorates and Mandates for local defence, the suppression of inter-tribal trouble or insurrection, and the maintenance of internal security. These forces fall into two groups:—

(a) Permanent forces, of which the most important are the King's African Rifles in the British East African territories; the Royal West African Frontier Force in West Africa; the Sudan Defence Force; and the Transjordan Frontier Force. The combined strength of these is about 13,000.

(b) Volunteer forces, partly trained, and only liable to service when called out by proclamation, in case of emergency, in defence of the Colony.

Of the four permanent forces referred to, the King's African Rifles (except the battalion raised for local defence in the Mandate of Tanganyika), and the Royal West African Frontier Force can be called on to serve outside their own territories by order of the Secretary of State for the Colonies. The Sudan Defence Force, on the other hand, consists of irregular troops who receive a consolidated rate of pay out of which they normally provide their own food and accommodation, and is not intended for service outside the Sudan or adjacent regions. In the case of the Transjordan Frontier Force, which was raised for military duties in Palestine and Transjordan, the terms of service (and of the mandate) forbid its employment outside its mandated area, except "in some adjacent region where it is deemed necessary for the defence of Palestine and Transjordan." It may be added that, in any case, none of these forces are trained or equipped for more than local operations. They are merely well armed and efficient bodies of police, officered by British officers, and capable of

dealing effectively with the responsibilities which they normally bear.

The land forces of Great Britain consists of :

- British Land Forces*
1. The British Regular Army, 212,000 strong, of which 120,000 are normally at home ; 34,000 in Colonial stations and 58,000 in India and Burma.
 2. The Army Reserve which is composed of men who have completed their period of colour service with the Army. Strength, 90,000.¹
 3. The Supplementary Reserve of Officers and the Supplementary Reserve, created in 1924, for the purpose of supplying officers and skilled mechanics, etc., respectively, to the Army on mobilization. Strength, 22,000.
 4. The Territorial Army, of 12 Divisions, 2 Anti-Aircraft Divisions, 12 Regiments of Yeomanry and 2 of Scouts, which is not available for service overseas without special legislation. Individual members are, however, asked to accept the liability for foreign service if required, and the Territorial Army is now regarded as the chief basis of expansion on which a National Army might be built up in time of necessity. Strength, 155,000. It has been entrusted with the responsibility for Home Defence, the protection of the Home bases and ports and the land defence against air attack on Great Britain. To assist in this purpose National Defence Companies of the Territorial Army, consisting of ex-Service men of 45 to 60 years of age are now being raised. These would be used in time of danger or of war to protect important points in this country. The total establishment of these companies will be 8,450.

The British Regular Army occupies a unique place among the military forces of the Empire. Unlike the Dominion forces it is immediately available, without special legislation, for service wherever required. Unlike the Indian Army it is homogeneous in race, language and religion and is technically equipped to a high degree. In India and parts of the Colonial Empire it gives an invaluable backing to the troops which are locally recruited : for internal security duties, it has a

¹ It is now proposed to allow a portion of these to re-engage for pension so as to increase the strength with the Colours

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special value in those countries where local disturbances, caused by racial or religious divisions, demand the use of troops who are good-humouredly indifferent to any of the factions concerned. And finally, it is unique in the contrast between its size and its responsibilities. The varied nature of these responsibilities is evident from the following table which shows the distribution of Cavalry, Artillery, Infantry and the Royal Tank Corps in January, 1937.

DISTRIBUTION OF BRITISH REGULAR ARMY (Jan 1937)

	Cavalry		R Artillery	Infantry		R. Tank Corps		Total Personnel
	No. of Regiments		Batteries	Battalions				
	House hold	Line		Foot - guards	Line	Battns	A. C. Coys.	
At Home	2	12	138	8	55	5		<u>120,000</u>
Colonies, etc. :								} 34,000
Gibraltar ...			4		2			
Malta ...			8		2			
Cyprus ...					1Coy.*			
Bermuda ..					} 1			
Jamaica ...			1					
Mauritius ...			1					
Ceylon ...			2					
Malaya ...			6		2			
Hong-Kong			4		3			
Shanghai ...					1			
Tientsin ...					1			
Elsewhere :								
Egypt ...		3	6	2	4	1		} 34,000
Sudan ...					2			
Palestine ...					8			
Aden ...			1					
India & Burma		5	63		44	3Coy.	5	<u>58,000</u>

NOTE.—*One of the two battalions in Egypt now provides one company as garrison for Cyprus (v. page 118)

From this table it is evident that four-ninths, or almost one half, of the total strength is normally stationed outside Great Britain, fulfilling the important duties of providing:—

- (a) Garrisons at naval bases, defended ports and harbours of Imperial importance.
- (b) Garrisons in India, Egypt, the Sudan, Palestine, Cyprus and China, to assist local forces in maintaining internal security and to bear the first brunt of external attack until reinforcements are available.

The remainder, in accordance with the Cardwell system, is at home :

- (i) To find reliefs and drafts for the overseas garrisons.
- (ii) To provide a framework on which can be constructed, by utilizing the Reserves, an expeditionary force of not more than one Mobile Division and five Infantry Divisions to meet any of our major responsibilities of Imperial defence.

The total strength of the Regular Army bears no relation therefore to the strength of other armies, but is based entirely on the normal requirements of our overseas garrisons, and the need for constant interchange between the Units at home and those abroad. The potential Expeditionary Force is merely a by-product of this system.

No other country in the world is content to sustain comparable responsibilities with such an economy of forces. This is strikingly evident of the Empire as a whole, if we contrast the total strength of its permanent land forces with its total population. Thus, at present, there are :—

The British Army	..	...	...	212,000
The Indian Army	...	...	...	159,000
Indian State Forces	..	...	...	44,000
Dominion Permanent Forces	...	...	...	16,000
Permanent Colonial Forces	..	...	...	13,000
				<hr/>
				444,000

contrasted with a total population of about 490 millions.

Dominion Air Forces

THE AIR FORCES OF THE EMPIRE

The Dominions all possess small permanent Air Forces, supplemented generally by subsidized systems of civil aviation which are designed to produce and maintain a reserve of pilots and mechanics and to provide a basis for expansion. India, too, is just beginning to create the nucleus of a small Air Force of its own. But the strength of these permanent forces is as yet so small that they could hardly produce at immediate call any serious contribution to the defence of the Empire, and the main responsibility for air operations and air defence rests, therefore, on the Royal Air Force, which must perform the same function in this connection as that performed by the British Regular Army, viz., of providing the breathing

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space necessary for the development of the potential resources.

The Air Forces of Great Britain consist of :

Permanent Forces :

(a) The Royal Air Force.

*The Royal
Air Force*

(b) The Royal Air Force Reserve, which is composed of officers and men who have completed their period of service on the active list, together with officers and airmen entered direct from civil life.

Non-Permanent Forces

(c) The Royal Air Force Special Reserve, which is composed of squadrons with a certain proportion of regular personnel, and which forms part of a Metropolitan Defence Force.

(d) The Auxiliary Air Force, which is also part of the Metropolitan Defence Force, and has a staff of regular Air Force personnel for administrative and instructional duties.

The manifold duties and responsibilities of the Royal Air Force are well shown by the following table which gives the distribution of units, apart from the Fleet Air Arm, in Jan. 1937.

		<i>Bomber Squa- drons</i>	<i>Fighter Squa- drons</i>	<i>Flying Boat Squa- drons</i>	<i>Bomber Trans- port Squa- drons</i>	<i>Torpedo Bomber Squa- drons</i>	<i>Army Co- operation Squa- drons</i>
Air Defence of Great Britain	Bomber Com- mand	45*					
	Fighter Com- mand (Uxbridge)		22				5
	Coastal Command		2	5			
<i>Abroad :</i>							
Egypt	... ..	2			1		1
Sudan	... ..	1					
Palestine and Transjordan	... ..	3					
Iraq	... ..	3		1	1		
India	... ..	4					4
Aden	... ..	1					
Mediterranean (Malta)	... ..			1			
Singapore	... ..			2		2	
Hong-Kong (Kaitak)	... ..					

*Includes 14 Auxiliary Squadrons.

In addition, there are about seven squadrons of the Fleet Air Arm with the Home Fleet ; three with the Mediterranean Fleet ; two in the Far East, as well as Fleet Fighter and Spotter Flights with other naval formations.

At home, therefore, there is a force whose primary rôle is the defence of Great Britain, consisting of fighters to engage enemy bombers and bomber squadrons to counter-attack enemy bases, together with five Army Co-operation Squadrons, one of which is allotted for training to each regular Division. There are also some seven squadrons of the Fleet Air Arm, equipped and trained for the various duties, such as reconnaissance, spotting, torpedo attack and air fighting, which may be required in the protection of our shipping in the home waters or in fleet actions. This whole force at home is also an Imperial reserve from which the normal drafts and reinforcements for abroad are formed, and from which, in war, the air contingent of an expeditionary force would be drawn.

Abroad, there are contingents at Malta, Singapore and Hong-Kong to co-operate with the naval and land forces in the defence of these Imperial bases ; others in Egypt to co-operate with the British and Egyptian Armies in maintaining internal security and the safety of the Suez Canal from sabotage or attack ; a considerable force in India to assist the Army in India in its internal and external responsibilities ; while in Aden and Iraq the responsibility for the control and safety of these regions is vested in the Air Force, and in Palestine that responsibility has only recently been transferred to the British Army.

Two other features of the distribution require mention. They are the way in which the air units are spread from Egypt to Singapore along the Imperial air route to India and Australia, and the considerable concentration, amounting to fourteen squadrons, which is situated in the region of the Middle East which is central both to our sea and air communications. This concentration in Egypt, Palestine and Iraq is well placed as a reserve for providing reinforcements rapidly either eastwards or westwards. Air bases in Ceylon, the Nicobar Islands and Penang are projected and will give, when constructed, the necessary facilities for the transfer eastwards of air forces.

The total strength of the Royal Air Force at the present time bears little comparison with the magnitude of foreign air forces or indeed with its responsibilities for Home Defence alone. The principle, however, of "equality with the greatest

air force within striking distance of Great Britain" was stated in 1923 and reaffirmed constantly by the British Government since 1934. The White Paper on Defence (1936) announced that the Home Defence Air Force would be increased to 123 squadrons by March 1937, that 4 auxiliary squadrons would be raised for co-operation with the Territorial Army; that the five regular A.C. squadrons would be increased to seven; that the number of air units abroad would be increased by 12 squadrons, which would be located at strategic points and that the Fleet Air Arm would be substantially increased. This expansion is now taking place, with the result that the table on page 33 will require constant additions.

THE CO-ORDINATION OF THE DEFENCE FORCES AND OF DEFENCE POLICY

It has already been shown that the forces of Great Britain, the Colonies, Protectorates, Mandates, India and the Anglo-Egyptian Sudan are directly or indirectly under the control of the British Government, and that the British Cabinet is therefore the political body which is ultimately responsible for the co-ordination of these forces, and for ensuring such uniformity of doctrine, training and equipment throughout them as is necessary. The Cabinet is, however, a body of politicians, only temporarily in office, and must naturally be guided by expert opinion in making its decisions. The chief organ for supplying this expert advice, in the case of the British forces, is the Committee of Imperial Defence.

This Committee, brought into existence in its present form by Lord Balfour in 1904, consists of the Prime Minister of Great Britain as President together with such other ministers, officials, or expert advisors, as, having regard to the nature of the subject to be discussed, he may summon to assist him. Ordinarily, it is composed of the following:—The Lord President of the Council; the Minister for the Co-ordination of Defence; the Secretaries of State for Foreign Affairs, for Dominion Affairs, for the Colonies, for Home, for War, for Air, for India, the First Lord of the Admiralty, the Chancellor of the Exchequer or the Financial Secretary, the Chiefs of Staff of the three fighting services, the Perma-

Co-ordination of British Forces
(1) *The Committee of Imperial Defence*

nent Under Secretary for Foreign Affairs. In addition to these, other ministers, officers, officials and experts of the Home Government, the Dominions and India may be invited to attend from time to time when questions are under discussion which require their advice. The Committee has a permanent secretariat, consisting of a secretary who is also the head of the Cabinet secretariat, thus ensuring further connection with the Cabinet, and four assistant secretaries nominated by the Prime Minister on the recommendations of the First Lord of the Admiralty, the Secretaries of State for War, for Air and for India respectively. This secretariat acts as a liaison organization between the Chairman of the Committee and the Service Departments.

It will be seen that there is a great elasticity of membership which enables the Cabinet to receive advice, not merely on purely service aspects, but also on all the other departmental and technical aspects as well, before making a decision, and that there is provision also for the association of the Dominions and India in the work of the Committee.

Much of the detailed work of the Committee is undertaken by sub-committees of which there are at present about fifty, but, of these, three are of special importance.

(1) The Committee of the three Chiefs of Staff is the most important of these bodies. Under the Chairman of the Committee of Imperial Defence, it is responsible for "keeping the defence situation as a whole constantly under review so as to ensure that defence preparations and plans and the expenditure thereupon are co-ordinated and framed to meet policy, that full information as to the changing naval, military and air situation may always be available to the Committee of Imperial Defence and that resolutions as to the requisite action thereupon may be submitted for its consideration. In addition to the functions of the Chiefs of Staff as advisers on questions of sea, land and air policy respectively to their own Board or Council, each of the three Chiefs of Staff has an individual and collective responsibility for advising on defence policy as a whole, the three constituting as it were a Super-Chief of a War Staff in Commission. In carrying out this function they will meet together for the discussion of questions which affect their joint responsibilities."

This function of separate and joint responsibility has been emphasized by the issue to each of a warrant signed by the Prime Minister.

(2) The Man Power Committee deals with the organization of man power in time of war.

(3) The Principal Supply Officers Committee "fills in the field of supply an advisory and co-ordinating rôle similar to that of the Chief of Staff Committee in Staff questions."

The Committee of Imperial Defence is, however, purely a consultative and advisory body, and the final decision on all matters of policy must be made by the Cabinet. Thus, though its field of survey is at least as comprehensive as would be that of a Ministry of Defence, it does not possess the great supervisory and executive powers which would be entrusted to such a ministry, nor does it in any sense, relieve the Cabinet of the responsibility for any action, or for a decision where the advice offered by the three Chiefs of Staff is conflicting.

During the period of tension with Italy regarding the Italian-Abyssinian dispute and the resulting movements of larger British forces to Egypt and of the Mediterranean Fleet to Alexandria, a great deal of public and parliamentary criticism was focussed on the need for greater co-ordination between our foreign and defence policy, and also between the British defence forces themselves. With regard to the second it was asserted in some quarters that the Chiefs of Staff Sub-Committee "had not completely fulfilled its duty to advise the Cabinet on our defence policy as a whole," but had (in the words of Lord Trenchard) avoided "issues on which vital differences of opinion might arise, and restricted the scope of the Committee's reports to matters on which agreement can be reached by 'give and take.'" It was also alleged that owing to his many duties the Prime Minister, who is the nominal Chairman of the Chiefs of Staff Sub-Committee, could rarely attend its meetings and that it was therefore merely a meeting of departmental heads of separate services without any unifying control. Further, it was said that there was no co-ordination with regard to the allocation of finance or expenditure on supplies in connection with the three services.

(ii) *The
Minister
for Co-
ordination of
Defence*

In answer to these criticisms the Prime Minister stated that the Government had set up in July, 1935, a special ministerial sub-committee, known as the Defence Policy and Requirements Committee, to keep the defence situation under review and to ensure that our defence arrangements and our foreign policy are in line. He also announced the appointment of a special Minister to act as deputy chairman of the C.I.D. and to undertake "the general day to day supervision and control on the Prime Minister's behalf of the whole organization and activity of the C.I.D." This Minister, "for the Co-ordination of Defence" is Chairman of the Principal Supply Officers' Sub-Committee, but not normally of the Chiefs of Staff Sub-Committee, though he can convene it under his Chairmanship if necessary.

Some critics of this measure have stated that it does not go far enough. They argue that the new Minister's powers are too vague and sketchy ; that he ought to be the permanent head of the Chiefs of Staff Committee and chief adviser to the Cabinet on the allocation of funds between the different services. They also argue that, on similar lines, a Ministry of Supply, responsible for the supply of materials in war and for industrial co-operation to that end should be formed, which could utilize the Principal Supply Officers Sub-Committee as its chief technical staff.

(iii) *The
Imperial
Defence
College*

The Imperial Defence College, formed in 1926, aims at producing gradually a body of experts who have a wider outlook on the problems of Imperial Defence than the outlook of one Service or another. It therefore trains a small number of officers, chosen from the three services, and also of civilian officials, in the broadest aspects of Imperial strategy, and "the occasional examination of current problems of Imperial Defence referred to it by the Chiefs of Staff Committee, in which the supervision of the College for professional purposes is vested." The association of this College with the Dominions and India is ensured by vacancies which are allotted to those countries. Naval, military and air officers are successively chosen as Commandant of the College in order to avoid undue stress being placed on any one arm, and to ensure that the views of all three arms are adequately represented in its teaching.

The Staff Colleges, while primarily concerned with the training of Staff Officers for their own respective services, also provide means for building up a liaison between the services. For this purpose, vacancies are allotted at Camberley, Quetta, Greenwich (Naval) and Andover (Air) to officers from other services and from the Dominions as well.

Uniformity between the British forces and those of India and the Colonies, Protectorates, Mandates and Dependencies is brought about by a great variety of agencies such as the following: The King's Commissioned Officers in all these military forces have received the same type of training and use the same manuals. All must pass the same promotion examinations, and to all are open the vacancies at the Staff Colleges at Camberley and Quetta. The office of Commander-in-Chief in India is held alternately by British and Indian Army officers; higher staff appointments in India are divided among officers of the two armies. British and Indian battalions are brigaded together. The officers of British units are encouraged to learn Urdu, and Indian officers and other ranks are encouraged to learn English, in order that co-operation in war may be more effective. By means such as these, uniformity of doctrine and training and also similarity in arms and equipment have, in a general sense, been achieved, though minor differences, owing to local or climatic causes, must be retained.

As the forces of the Dominions are completely under the control of the Dominion Governments, co-ordination between them and the British forces can only be attained by consultation and agreement. The political means by which these are brought about are the Imperial Conferences, which have generally applied themselves to the problem with success, and by their recommendations a large number of technical means have been established. Thus the Imperial General Staff works in close touch with the General Staffs in the Dominions; liaison officers are appointed between British and Dominion Staffs; vacancies are allotted to officers from the Dominions at the Staff Colleges at Camberley, Quetta, Greenwich and Andover, and at the Imperial Defence College; naval officers from a Dominion navy serve alternately in the Royal Navy and their own Navy; air units and naval units may be

(iv) *The Staff Colleges*

Uniformity between British Forces of India and The Colonies

Uniformity between British and Dominion Forces

exchanged temporarily between the British and Dominion governments ; Dominion officers are frequently attached to British units for a period of training ; the forces of the Dominions and Great Britain are organized on similar lines ; similar patterns of weapons and equipment are used ; the same manuals of training are employed ; and finally, the Committee of Imperial Defence is available to advise Dominion Governments as well as the British Government. Indeed its very lack of rigidity in membership and its purely advisory powers make this Committee more suitable as a means of co-operation between Britain and the Dominions than would be some less elastic body. "Dominions can refer particular questions to it for advice, as they have done up to the most recent times : they can be represented on it to such degree as they themselves desire. . . . They can accept, modify or reject its advice."¹ It fits in, therefore, with the whole extremely elastic relationship that exists between Britain and the Dominions.

It is clear, however, that there are certain weaknesses in the framework of defence. First, there is the element of uncertainty as to the action of Dominions in a crisis in which Great Britain is involved. They have the right to determine the nature and extent of their obligations and participation at any time. Public opinion must be the deciding factor there as in Great Britain, and cannot be mortgaged beforehand. This is a fundamental principle in all the British democracies. No doubt, in a serious crisis, the moral, social and sentimental ties would triumph, and the British Commonwealth would present a united front ; but the element of uncertainty as to their participation might be sufficient to hinder the preparation of adequate concerted plans beforehand, and thus prejudice the whole course of operations from the outset.

Then again, the emphasis laid on local or national defence in the Dominions, the natural corollary to the intensely individualistic outlook of the various self-governing communities, tends to obscure the important fact that local protection is often not the best form of defence. No Dominion, for instance, maintains land or air contingents for immediate service abroad, and only Australia and New Zealand have naval

¹ Mr. Baldwin at Imperial Conference, 1926

forces of any importance. Yet it is conceivable that the safety of a Dominion might be decided, not locally, but on battlefields or on the seas many thousands of miles away. In any case, over-emphasis on local defence may tend to prevent the various forces of the British Commonwealth from being so co-ordinated as to avoid overlapping and gaps. The local outlook is likely to be wasteful in the end.

These weaknesses are at present not acute because Great Britain bears the chief burden of defence of the Empire. There is nothing altruistic in this, for even if the Dominions were no longer parts of the Commonwealth, Britain would still have world-wide interests, 400 million people and six million square miles of territory to defend, and it is doubtful whether she could reduce her forces by one battalion, battleship or aeroplane. But, with the inevitable development of the Dominions in population, wealth and resources and a diminution in the relative importance of Great Britain, some adjustment of the burden of defence will become inevitable. This will have to be accompanied by closer co-ordination if the Empire is to exert its maximum strength in any struggle in which it may become engaged. The solution of this problem of a more equitable sharing of the burden of defence and of closer co-ordination will no doubt be found, not in general and vague principles but in specific agreements defining the part which each Dominion will take in the defence of specific regions.

CHAPTER IV

POPULATION AND WAR

IN modern war, if on a scale similar to the last, the fighting forces and reserves available at the outset are only an advance guard of the national effort. They give time for the mobilization of the potential resources of man-power, the ultimate measure of which is all that part of the nation which is not too young, too old or too infirm to serve the country efficiently in or outside its fighting services. Hence, the qualities and defects of this potential reserve, and the plans for its efficient mobilization are a very vital part of the preparations for defence and are, therefore, a subject of study by one of the most important sub-committees of the Committee of Imperial Defence.

Such plans are necessary in order to avoid the wastage which results from extemporary measures ; to reduce to a minimum the time required to train men to take their part in the national effort, and to adapt the whole normal peacetime organization of the country to the needs of the war. The plans will naturally include preparations which are designed to avoid the uneconomic use of the best part of the potential resources at the outset, and also an organization to co-ordinate the requirements of the fighting services, munitions, transport, industry and agriculture.

The efficiency of the population in a war effort will depend not merely on its numbers but also on its characteristics. Mere numbers alone, in an age of mechanization, are no criterion of strength and indeed may be a source of weakness if difficult to feed and defend or if subject to panic or low morale. The positive qualities of homogeneity in race, language and religion, a common outlook and tradition, a capacity for leadership and initiative, good physique and a high standard of mental equipment and industrial skill are necessary. The distribution of the population, whether it is concentrated in a

comparatively small area and easily mobilized for the various activities required or dispersed over many widely-separated territories, is also important.

At the present time the distribution of population within the British Empire is as follows :—

<i>Populations of European Stock</i> <i>Millions.</i>		<i>Populations not of European Stock.</i> <i>Millions.</i>	
Great Britain and Northern Ireland	46	India	351
Colonies, Dependencies, etc	2	Colonies, Dependencies, etc.	68
Irish Free State		Total : 419	
Canada and Newfoundland	11		
Australia	7		
New Zealand	1½	Non-Europeans	419
Union of South Africa	2	Europeans	72
Total 72½		Grand Total 491	

Approximately six-sevenths of the total population, therefore, is not of European stock, and over five-sevenths of it lives in tropical countries whose only coasts are on the Indian Ocean. It may be said, in general, of the non-European part that it has not yet attained a high level of technical knowledge or skill ; that it comprises, sometimes within one area, many races, languages and religions ; that in some cases religious or racial differences produce acute problems which render unity of effort almost impossible ; and that it contains large sections which, by tradition and characteristics, are unable to make any important contribution to defence or even to a war effort in a wider sense. In India alone there are five-sixths of the non-European population of the Empire, but its 351 million people are so divided by barriers of race, language, religion and caste that unity of purpose is wellnigh impossible. Less than one-tenth of the whole is literate ; the average standard of technical skill for the great industries required in war is low ; while a distinction which exists between classes of the community with warlike traditions and others without still further complicates the situation. Nor are these characteristics confined to India. They apply almost equally to the fifty million Africans of our Dependencies in Africa, and in varying degrees to almost all the non-European populations of the Empire.

A large part, therefore, of the vast population of the Empire

*Internal
Security
problems*

has serious elements of weakness. Racial and religious antagonisms are liable, as in India and Palestine, to create internal strife ; mixed populations of uncertain loyalty and morale complicate defence problems, as in Hong-Kong and Singapore ; the inevitable progress of education produces a demand for a too rapid constitutional advance, backed by unconstitutional methods. To ensure the maintenance of law and order, and support of the civil authority, with the minimum of force applied at the right time and in the right place, is therefore an important responsibility of our defence forces in these regions.

*The popula-
tion of
European
stock*

The seventy-two millions of European stock are, on the other hand, mainly homogeneous in race, language and religion, and have, for the most part, a common heritage of tradition. In Canada, there are some three million French Canadians living almost entirely in the Province of Quebec, and perhaps half a million other people of European and non-British blood elsewhere ; and in South Africa there are 900,000 Dutch ; but altogether, in the Empire there are less than seven million whites who are not of British extraction, out of the seventy-one millions. This compares very favourably with the state of affairs in the United States where, in 1931, there were over thirteen million foreign-born whites out of a total white population of 109 millions. Literacy, technical skill, capacity for leadership, organizing ability and power of initiative are qualities shared by most western European peoples and are common among the British race ; and there is no distinction between fighting and non-fighting classes.

For these reasons, the white population of the Empire bears, in a proportion far exceeding its numerical strength, the responsibility for administration, development and defence throughout the Empire. The last is indicated by the numbers raised for service in the various parts during the war.

Country	Number of men raised	Estimated Population (1914)	Percentage
British Isles	5,700,000	46,000,000	12.4
Canada ...	628,000	7,600,000	8.3
Australia.	412,000	4,700,000	8.7
New Zealand	128,000	1,100,000	11.6
South Africa	136,000	1,200,000	11.3
India ...	1,440,000	316,000,000	3
The Rest. .	134,000	50,000,000	0.2

Looked at from these aspects, the portion of the vast population of the Empire on which war effort essentially depends is less than that of Russia or the United States, and about equal to that of Japan or Germany ; but differs from these countries in the fact that it is distributed over self-governing territories which are separated by great distances. Two-thirds of the total white population is, however, concentrated in Great Britain and Northern Ireland which, therefore, forms the main base for development and defence ; while over 80 per cent. is situated in lands round the North Atlantic, a distribution which is advantageous in regard to mobilizing and concentrating man power for national effort in a European war, but is less satisfactory in the case of a war in the East or Far East where a large part of the responsibilities of the Empire in population, territory and trade are placed.

THE REDISTRIBUTION OF THE WHITE POPULATION

The concentration of two-thirds of the total white population in one of the smallest countries of the British Commonwealth of Nations necessarily implies a sparseness of population elsewhere. The figures quoted at the end of this chapter are of interest in this connection, though it must be emphasized that such statistics showing crude densities of population per square mile must be interpreted in the light of existing climatic, physical, economic and racial conditions. From an economic aspect, two persons per square mile would be a crowd in the Sahara, while elsewhere 500 or more persons per square mile might exist in comparative comfort. The number of people which a country can support at a comfortable standard of living is impossible to calculate on any simple basis of area. Its climate, agricultural and mineral resources and the skill of its people to use those resources to the best advantage must be taken into account. Even then the result may be fallacious, for it may be possible for a country to support a very large population by selling sufficient goods and services abroad to enable it to purchase the foodstuffs and raw materials which it does not possess within its own territory. In such a case the availability of foreign markets is obviously a factor of prime important.

Hence dogmatic statements that certain countries are

"over-populated" or "under-populated" are difficult to prove. Nevertheless, on the basis of internal resources only expert opinion appears to be agreed that Canada could hold 100 millions, Australia 20 or 30 millions, South Africa and New Zealand 12 or 15 millions each, if these countries were as closely developed as European lands like Germany. There are, therefore, some grounds for the assumption that a more even distribution of the white population of the British Commonwealth is desirable. Politically, the present situation invites the challenge that the British peoples hold but do not adequately develop great areas in the temperate regions of the world. This may be used as an argument for aggression by some less favourably situated power which may urge necessity as its excuse. Strategically, the small populations of some of the Dominions would prevent them from offering a substantial resistance against any such attack. Further, interchange of population between Great Britain and the Dominions would be valuable in itself. Experience has shown that generally it invigorates the individual migrant and thus adds to the racial strength of the whole Commonwealth.

For these reasons, Imperial Conferences have repeatedly emphasized the need for "a redistribution of the white population of the Empire, in the best interests of the Empire as a whole," and various measures have been taken, notably under the Empire Settlement Act of 1922, to assist overseas settlement. These measures have not been so successful as was anticipated, and since 1929 the flow of emigration to the Dominions dwindled to a mere trickle and finally stopped. Indeed, in most cases the flow was reversed homewards.

This has been chiefly due to the overproduction of primary commodities which are the mainstay of Dominion commerce, and the parallel restriction of markets consequent on the present world wide policy of economic nationalism. Until there is a sufficient demand for wheat, wool, etc., the Dominions cannot absorb more agricultural settlers. The development of industries is a slow process and in any case their urban and industrial populations are, at present, being augmented by a movement from the country to the towns, and each of the Dominions is suffering from an unemployment problem. Something may be done to stimulate overseas settlement in

a small way by state aided measures, but the resumption of any great flow is mainly dependent on the solution of the wider economic problems of production, distribution and markets, which confront not merely the Empire but all great countries. Emigrants are unlikely to leave Great Britain unless they are confident that, by so doing, they can "better themselves" socially and economically, and this is not the case at present.

POPULATIONS OF CHIEF COUNTRIES IN 1931

<i>Country</i>	<i>Area Square Miles 000's omitted</i>	<i>Population 000's omitted</i>	<i>Density of Population</i>
<i>British Empire :</i>			
Great Britain and Northern Ireland...	95	46,035	485
Irish Free State ...	27	2,945	109
Canada	3,730	10,353	2·8
Newfoundland ...	43	272	6
Australia	2,975	6,500	2·2
New Zealand ...	103	1,513	14
The Union of South Africa	472	1,827 Whites 7,000 Coloured ¹	17
India	1,805	351,450	175
Total Estimate of the British Empire ...	13,355	490,000 ¹	36·7
<i>Foreign Countries :</i>			
France	218	41,400	190
Whole French Empire	4,200	101,000 ¹	24
Germany	182	65,289	359
Italy	120	41,145	343
Whole Italian Empire	542	43,000 ¹	79
Japan	148	64,448	435
Whole Japanese Empire	263	90,396	344
U.S.A.	2,974	123,113	41
Whole U.S.A. Territories	3,685	137,000	37
U.S.S.R.	8,242	161,000 ¹	19

¹ Estimated. Complete figures not available.

Nevertheless, owing mainly to higher birth rates, the populations of the Dominions are increasing somewhat more rapidly than that of Great Britain (*e.g.*, Australia 17 per thousand; New Zealand, 17·1; England and Wales 15·3), and if emigration increases with returning prosperity in the Dominions, the process of redistribution may be speeded up. Already there are indications that the population of Great Britain will shortly begin to decline owing to the low birthrate, and if this trend is maintained will be less than 33 millions in

1976, and if emigration at the same time is resumed, then there will be a marked increase in the proportion of people of European stock resident in the Dominions, and a decline in the relative importance of Great Britain as a base of man power.

There are indications, also, of a very slow but progressive change in the homogeneity of the white races of the Empire. In Canada, for instance, the proportion of the population which is not of British stock has increased by 8 per cent. during the last 50 years, and this process appears to be continuing. Further, the influx of American immigrants, of American financial interests, sports, journalism, and many other agencies, due to contiguity on a long frontier where no language barrier exists, may have a cumulative effect in that Dominion. Similarly, in South Africa the Dutch section of the population is increasing more rapidly than the British section. Even in Dominions like Australia and New Zealand, whose populations are almost entirely British in stock, the climate, physical conditions and different problems are likely to produce differences of outlook, modes of thought, manners and even ways of speech.

These inevitable changes make the development of rapid means of communication increasingly desirable, in order to counteract the effects of dispersion, to enable close touch to be maintained, to provide more effective means of co-operation and reduce to a minimum the potential tendencies towards divergent points of view.

A DECLINE IN BRITISH MAN-POWER

Mention has been made of a likely decrease in the population of Great Britain in the near future. At present the effects of a very low birthrate are being masked by the increased length of life; the population is becoming progressively older on the average; the proportion of young people is becoming smaller. If this condition of affairs continues it has been calculated that the population of Great Britain in 1946 will be 43,890,000, and in 1976 will be only 32,712,000. Apart from all considerations such as the effects on overseas settlement and the title to ownership of a quarter of the world, it is evident that a decline in population of this magnitude would have great effects on our capacity for defence against

European countries which had maintained or perhaps increased their present populations. Germany, Italy and France are, indeed, taking some steps by propaganda and financial assistance to prevent their birth rates from falling below the line where they cease to replace the deaths.

A NOTE ON OVERSEAS SETTLEMENT

The Empire Settlement Act of 1922 empowered the British Government to co-operate with Dominion Governments or with public or private bodies in furthering British overseas settlement by bearing not more than half the expenses of agreed schemes under the Act, and provided up to a maximum of £3 million a year for 15 years for this purpose. Such agreed schemes might be either (a) assisted passage schemes for those applicants who had assured employment awaiting them on arrival overseas or (b) land settlement schemes *e.g.* the settlement of families, groups or individuals on undeveloped, partly developed or wholly developed land.

Since 1929, owing to the fall in commodity prices, the constriction of markets and consequent unemployment in the Dominions it has been necessary to suspend practically all these schemes. Indeed, by 1932, the net migration from this country had ceased entirely.

In 1937 the British Government announced that the operation of the Act would be extended for another 15 years and obtained Parliamentary sanction for the expenditure of up to £1½ millions a year for this purpose. Henceforward, it was announced, in certain cases, the British Government could contribute up to 75 per cent (instead of 50 per cent) of the cost of approved schemes. It is hoped that with the return of a measure of prosperity a flow of migration will be welcomed by the Dominions. Whether this hope will be justified or not will depend on many factors, the most important of which will be the expansion of Dominion markets at home and abroad. Obviously men will not be accepted by the Dominions unless what they produce can be sold at a reasonable price; nor will individuals migrate unless they can better themselves socially and financially by so doing. There is no valid reason for paying transport charges merely to shift unemployed from Great Britain to Dominions where they may be unemployed again.

In the past, overseas settlement was considered mainly from the standpoint of agricultural settlement. This complicated the problem because the portion of the British population which was desirous of migrating was mainly industrial. Further, from a national standpoint it was, and is, undesirable that our agricultural population in Great Britain, which is steadily decreasing, should be still further depleted by migration. It is possible that the problem may be viewed from a different angle in the future and that the Dominions may be able to absorb a moderate but steady number of British industrial workers in the secondary industries which are being developed.

CHAPTER V

A GENERAL SURVEY OF THE MATERIAL RESOURCES OF THE EMPIRE

THE possession of reliable sources of essential foodstuffs and raw materials is of vital importance to a nation in time of war. If these sources are of world importance they are still more valuable, as the denial of supplies from them can be used as a powerful economic weapon against an aggressor and as a lever to influence neutral countries. From the standpoint of Imperial defence, therefore, two questions are of paramount interest : (1) In what respects is the British Empire capable of supplying its own needs ? (2) In what respects does it control sources of food and raw materials essential to other nations ? A brief and necessarily incomplete answer to these two questions will be given in the succeeding pages, where some of the more important agricultural and mineral resources of the Empire are summarized.

At the same time, however, a warning against over-simplifying the answer to the first of these questions is necessary. The dispersion of the Empire's sources makes any comparison between it and an almost self-contained country such as the United States highly misleading. In time of war, as in peace, it may be more advantageous for Great Britain to obtain supplies of important commodities from foreign countries which are comparatively near than from far distant parts of the Empire. Distance, the amount of shipping available, the liability to attack *en route*, and the period of the year when supplies are available must all be taken into account. The possession of great quantities of wool and beef in Australia or mutton and dairy produce in New Zealand would be of no value to Great Britain if sufficient ships were not available for the long journeys to and from these Dominions, or if the sea routes to them were liable to serious attack. Nearer sources, in foreign countries such as

the Argentine, Brazil and the United States, might have to serve our purpose. At the same time it must be remembered that supplies from foreign sources such as these, during war as in time of peace, would have to be paid for immediately by exports, gold, services, the transfer of dividends on foreign investments, or the sale of the investments themselves; whereas long-term credit arrangements for the purchase of supplies within the Empire would be a family affair and hence easier to adjust.

In view of these facts it is evident that the financial resources of the Empire and particularly of Great Britain, which is the only part with large investments abroad, are an essential element which must be considered in our survey. So also are our shipping resources and the multitude of services associated with them.

THE OVERSEAS INVESTMENTS OF GREAT BRITAIN

An exact analysis of the total overseas investments of Great Britain would have to include not merely those quoted on the London Stock Exchange, but others not dealt with in the London market, as well as investments in property, mortgages, etc., and would be impossible to obtain with accuracy. But they amount approximately to £3,700 millions, on which we receive over £155 millions in interest annually.

These figures are some indication of the financial strength of Great Britain and also of British interests in foreign countries. It must be remembered, however, that in war, many of these investments might be frozen, others might depreciate and some might cease to exist, and that the chief means of payment for commodities obtained from foreign countries would, as in peace, be by means of exports, the flow of which must be maintained, even under the strain of war-time exertions.

THE POSITION OF THE BRITISH EMPIRE WITH REGARD TO AGRICULTURAL RESOURCES

The agricultural resources of the British Empire fall into four groups :—

- A. Those commodities, of which the Empire has a surplus above its own requirements. In these instances foreign countries are, in some degree, dependent on us.

This class includes wheat, wool, mutton, rice, jute, rubber, and vegetable oils.

- B. Those commodities, the supply of which within the Empire approximately balances Empire requirements.

The most important of these are oats, barley, sisal and timber.

- C. Those commodities, the supply of which within the Empire is not sufficient to meet Empire demands, and for which we are therefore partly dependent on external sources.

The most important of these are cotton, sugar and maize.

- D. Those commodities, the supply of which is entirely or almost entirely from foreign sources. The most important of these are silk, flax, hemp, manila.

Wheat

The British Empire produces about 23 per cent. of the world's production of wheat, and has, regarding it as one unit, a surplus over its own requirements of about four million tons.

The chief exporting countries in order of importance are Canada, Australia and India and the chief importing country within the Empire is, of course, Great Britain.

In Canada, new areas for wheat growing, such as the Peace River country, are constantly being opened up for production, and the discovery of varieties of wheat which can grow under colder conditions is helping to extend wheat cultivation into more northern districts. In Victoria, South Australia and the south-west corner of Western Australia, wheat is one of the staple crops and, in spite of a downward trend of prices, the acreage under cultivation is increasing. The Sukkur and Sutlej irrigation schemes in India will add, when completed,¹ about 10 million acres to the area suitable for its cultivation in India, though the rise in the standard of living in that country will probably keep step with the rise in production, and there may therefore be no greater surplus available for export.

In Great Britain the production of wheat is confined chiefly to East Anglia, where climate and soil combine to give more suitable conditions than elsewhere; but the total production averages about 1,600,000 tons a year, or a little more than one-fifth of our annual requirements. We, in this island, are

¹ The Sukkur barrage is complete, but the network of subsidiary canals, etc., is still under construction.

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therefore dependent on a supply from overseas for about 40 weeks each year.

As wheat is the staple food of most of the white people of the world, so is rice for the inhabitants of the Monsoon lands of Asia. It requires the abundant moisture and high temperature associated with Monsoon lands, but is also grown in other regions of sufficient warmth and water supply, such as the Nile Delta and the coastal plain of British Guiana. *Rice*

India (including Burma) produces more than 50 per cent. of the world's total production; and the exportable surplus of the Empire, which amounts almost to one million tons a year, comes chiefly from Burma.

The British Empire's requirements of oats are almost balanced by its production. The only country which imports large quantities is Great Britain, which depends on external supplies for about one-fifth of its needs each year; and, though this quantity is chiefly imported from the United States at present, the opening of new lands in Canada may improve the position. *Oats*

Canada is the greatest exporter of barley in the Empire, but other parts, notably India, Australia, Cyprus and Palestine, are now providing considerable quantities, and Empire requirements and supplies approximately balance. *Barley*

Maize is mainly a tropical cereal. Its yield per acre is about three times that of wheat, and it has a wide variety of uses. It can be used as a food for man (Indian corn, cornflour, hominy); and to an even greater extent as a fattening food for cattle. Starch and alcohol, also, can be obtained from it. *Maize*

The chief source of supply at present is the United States; and the Empire as a whole only produces about 60 per cent. of its requirements. India grows large quantities but has only a small surplus available for export. Recently, however, the development of maize production within the Empire has been accelerated, and the Union of South Africa, Kenya, Uganda, Rhodesia, Nyasaland and Tanganyika have had considerable and increasing amounts for export. There is every likelihood that a few years hence the Empire may be self-supporting with regard to this important commodity.

The situation with regard to beef is of special interest. The British Empire owns almost 40 per cent. of the total head *Beef*

of cattle in the world, yet 60 per cent. of our imports into Great Britain of beef come from Argentina, and Australia, with its vast possibilities for grazing, only supplies about 10 per cent. of our imports.

This situation, by which Argentina is our chief source of supply for imported beef, is partly due to the necessity for freezing beef at a temperature of 15° Fah. or lower, in order to keep it in good condition during the longer journey from Australia. In bringing it from Argentina it need only be "chilled" at a temperature of 28° Fah., and arrives in a more palatable and nutritious condition.

Great Britain depends on external supplies for about 40 per cent. of its total requirements of this commodity, i.e., for about five months in the year; but, if satisfactory methods can be applied to its transportation over long distances this shortage may, in the future perhaps, be supplied from within the Empire.¹ Australia is the largest stock farming country in the Empire, but the Union of South Africa has shown the greatest increase within recent years, and Rhodesia and Kenya are also paying much attention to the raising of beef for the meat trade.

*Mutton and
Lamb*

The British Empire owns more than one-third of the total number of sheep in the world; and the greatest exporting country is New Zealand, which exports from its famous Canterbury Plains in the South Island more than half of the world's total of mutton and lamb, or about three times as much as Argentina which is the next most important exporter.

Great Britain produces normally about 50 per cent. of the mutton and lamb which it uses, the balance being chiefly imported from New Zealand (50 per cent.), Argentina (25 per cent.) and Australia (10 per cent.). The British Empire taken as a whole, when imports and exports are balanced, has a surplus for disposal.

Sugar

Sugar is derived chiefly from the juice of the sugar cane and the roots of certain varieties of beet. The chief sources of supply to the British Empire are Cuba, Mauritius, the British West Indies, Peru, Java, British Guiana, South Africa, Australia, Kenya and the Fiji Islands. India, although a

¹ Since 1934, increasing quantities of "chilled beef" have been brought from Australia with success

large producer, requires to import a considerable quantity.¹ Taking the Empire as one unit the production is less than 70 per cent. of the demand. The growing of sugar beet in England is being pursued with some success, but only at the cost of a large government subsidy of about £7 millions a year.

The British Empire produces about 45 per cent. of the wool of the world, of which more than half is produced in Australia. *Wool* South Africa and New Zealand are also important sources.

Great Britain grows in this island roughly one-third of her requirements of wool; and the balance is chiefly imported from the Empire countries enumerated above.

The British Empire taken as one unit has a considerable balance for export.

Raw cotton is the basis of one of the three greatest British manufactures, and its supply is therefore of special importance. *Cotton* It can be grown only in warm or semi-tropical regions and where there is sufficient rainfall. Such conditions are found in the low-lying parts of South Carolina, Texas, Georgia, Alabama and Mississippi, which supply two-thirds of the raw cotton used in Lancashire. It is also one of the important crops in India, where it is grown chiefly on the western parts of the plain between the Indus and the Ganges, and on the black soil of the Deccan plateau. The yield in India is, however, smaller than in the United States and the quality is coarser and less valuable. Indian cotton is, therefore, not much used by British manufacturers who prefer a longer "staple"; and the surplus available for export from that country goes mainly to Japan, China and Germany.

Egypt and the Anglo-Egyptian Sudan are increasing in importance as cotton growing countries. Egypt is practically rainless, but the supply of Nile water is an admirable substitute, carrying alluvial soil over the land, and this, taken in conjunction with brilliant sunshine, makes Egyptian and Sudanese cotton quite equal to the best American. In Uganda the increase in production during recent years has been very notable; and smaller increases have been achieved in Tanganyika, Kenya, Nyasaland, Rhodesia, Nigeria. This development has been largely due to the researches and experimental work of the Empire Cotton Growing Corporation which

¹ This has been much reduced, with the development of sugar-growing in India

receives a Government grant and a levy of 1d. per bale on imported cotton from British cotton spinners.

The situation with regard to cotton is more precarious than that in regard to any other agricultural commodity. Omitting India and Egypt, the first because its short staple cotton is not suitable for manufacture in this country, and the second because it is not part of the British Empire, the total production in the Empire only represents about 10 per cent. of the demand. About two-thirds of the balance is obtained from the United States.

The various projects referred to in later chapters, particularly with reference to irrigation schemes in the Sudan, are therefore of great importance.

Jute

The Province of Bengal and the basin of the Lower Brahmaputra in British India, practically have a world monopoly in the production of jute.

Rubber

Nearly 60 per cent. of the world's supply of rubber is grown on British territory, the chief source being Malaya, and every nation which uses mechanical transport is in some degree dependent for its supplies on British sources. The Dutch East Indies and Brazil are the only important sources *outside* the British Empire.

THE POSITION WITH REGARD TO MINERAL RESOURCES

If the same method of classification is adopted with regard to minerals, as that adopted for agricultural commodities, the result is as follows :—

A. Asbestos, coal, chromium, cobalt, gold, graphite, lead, manganese, mica, nickel, platinum, tin, titanium, vanadium and zinc.

B. Tungsten, iron, copper, zinc, bauxite.

C. Aluminium, petroleum, pyrites, nitrates, silver, sulphur, uranium.

D. Antimony, mercury, molybdenum, potash.

Of these, coal and petroleum have a special significance as the chief sources of power and movement and will therefore be dealt with in subsequent sections. In the case of some of the other minerals mentioned above, a development of mineral sources known to exist may alter the category in which they appear ; and in one case—iron—the lower category is due not

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to shortage of native supplies, but to a number of geographical factors.

Aluminium has assumed a very important place among the *Aluminium* commercial minerals of the world. Bauxite is the most satisfactory source of supply, and at present Great Britain and Canada, who are the chief producers of the metal in the Empire, import large quantities of this ore from France and the United States. Cryolite, used in producing the metal, can only be obtained in large quantities from Greenland or Japan.

There are, however, deposits of bauxite in British Guiana, the Seychelles, Australia and India; and it is possible that production from these sources could be expanded to equal Empire demands. At present it falls far short.

Canada produces over 56 per cent. of the asbestos mined *Asbestos* in the world; and the British Empire has a considerable surplus above its requirements.

Chromium is used for the alloy "chrome steel," a very hard *Chromium* steel used in munitions; and also for rustless steel and chromium plating. The British Empire has large resources of this very important mineral in Rhodesia, and useful mines also near Quetta in Baluchistan. From these and various other sources over 50 per cent. of the world's supply of chrome is produced.

At present, Chile produces about 20 per cent., U.S.A. about *Copper* 16 per cent., Canada 13 per cent., and N. Rhodesia 12 per cent. of the world total of copper.

The Empire normally imports about 5 million tons of iron *Iron Ore* ore more than it exports, this figure being chiefly accounted for by the quantities of high grade ore obtained by Great Britain from Spain, Norway and other foreign countries. At a pinch, however, Great Britain could fall back on the native ores for her whole requirements instead of importing from one-third to one-half; and the Empire regarded as a unit could be self-supporting. The potential resources in many British countries are enormous, particularly in India, Newfoundland (which has some of the richest ore in the world and two of the largest mines), the Malay States, Australia and Nova Scotia.¹

The United States is the greatest producer of lead, but *Lead*

¹ Practically the entire output of high-grade iron ore from Malaya is taken by Japan.

owing to home requirements does not export as much as Australia or Canada.

Manganese Manganese is a necessary constituent in making Ferro-Manganese, which is used in the manufacture of steel. It is therefore a vital commodity in peace and war. It is also used for the manufacture of chlorine, electric batteries, etc.

The British Empire has a large net export of this mineral. India alone could supply the needs of the whole Empire, and there are important sources also in the Gold Coast, Queensland, Canada, Newfoundland and the Sinai peninsula.

Nitrates The Empire, in the past, has been dependent for its supplies of nitrates, for manures and also for explosives, on supplies of nitrate of soda from Chile and a more limited quantity of nitrate of potash from India. Now, however, synthetic nitrates are being prepared by Imperial Chemical Industries, Ltd., at Billingham in England; and it is no longer necessary to depend on external sources for British requirements.

Platinum The Empire production of platinum is rapidly increasing. The mines at Sudbury, Ontario, now produce supplies much in excess of the Empire demand; smaller quantities are obtained in South Africa; and Australia and New Zealand, also, have sources which are, at present, practically untapped. Until recently, Russia was the chief source.

Nickel Nickel is essential to the manufacture of munitions; and the Empire is fortunate therefore in producing over 80 per cent. of the world's supply of this mineral, most of which comes from mines at Sudbury in Southern Ontario.

Tin Although the Empire production of tin ore is less than half of the world's production the Empire production of the metal is over 80 per cent. This is chiefly due to large imports from the Dutch East Indies to Singapore, where the metal is refined, and which is a collecting centre for the neighbouring areas. The British Empire, taken as a whole, has a large surplus for export and indeed controls most of the tin supply of the world. The only foreign producer of great importance, apart from the Dutch East Indies, is Bolivia.

Titanium and Tungsten These minerals are essential constituents in various processes of the steel industry. Tungsten, for instance, is employed in the manufacture of high grade steels and for filaments in electric bulbs.

There are ample supplies of both minerals in the Empire. The ores of tungsten are found in Burma, the Malay States, Australia, Rhodesia and even Great Britain.

The Empire production of zinc is derived mainly from *Zinc* Australia, Canada and India and is slightly in excess of requirements.

The British Empire produces more than 70 per cent. of the *Gold* annual output of gold in the world ; the chief source of supply being the Union of South Africa, though considerable and increasing quantities are now being obtained in Canada. The recent discovery of gold in Kenya is also important.

THE POSITION WITH REGARD TO COAL SUPPLIES

Coal is still the chief foundation for industrial development; it is also the most important source of power for sea transport. Even in this age of petroleum 49 per cent. of the world's shipping uses coal as fuel, while some of the remainder can change from coal to oil or *vice versa* in accordance with the current prices of each. The possession of adequate coal resources is therefore essential to power and movement.

It is also essential as the raw material for many of our chemical industries, *e.g.*, for the production of synthetic dyes, benzol, etc.

The position with regard to the production of this commodity throughout the world is shown in the following table :—

<i>Average</i> <i>Foreign Countries (1925-29)</i>		<i>Average</i> <i>British Empire (1925-29)</i>	
	<i>metric tons</i>		<i>metric tons</i>
United States ...	546 millions	Great Britain ...	225 millions
Germany ...	149 "	India ...	30 "
France ...	51 "	Canada ...	12 "
Poland ...	38 "	South Africa ...	11 "
Japan ...	34 "	Australia ...	6 "
Russia ...	30 "		
China ...	29 "		
Belgium ...	26 "		
Holland ...	10 "		

This table does not, however, reveal the position which Great Britain holds as an exporter of coal. Our central situation relative to the world's chief lines of sea communication, the nearness of our coal fields to the seaports of Great Britain, their proximity to industrial centres in Europe, our

possession of ports suitable for coaling purposes in every sea, the excellence of the steam coal produced from British mines and our ownership of about 30 per cent. of the world's shipping, in which we can use coal as ballast on the outgoing journey, have all combined to make Great Britain the greatest exporter of this commodity in the world. Every country of Western Europe obtains a considerable quantity from us, and our exports go as far afield as the Argentine and Brazil. In spite of the economic crisis and trade restrictions in practically all the countries of the world, our exports of coal in 1936 were over 40 million tons. We are the only nation in a position to supply the needs of shipping in the North Sea, the Eastern and the Southern parts of the Atlantic and in the Mediterranean. As 49 per cent. of the merchant ships of the world still use coal as fuel, these facts are of great importance. They enable us to control, to some extent during war, the movements of neutral ships and to prevent neutral countries from assisting our enemies.

In addition to the resources of this mineral in Great Britain, there are large and for the most part undeveloped coalfields in other parts of the Empire, particularly in Canada. Much of the Canadian supply is, however, lignite which is not yet used for manufacturing purposes or for shipping, but it appears likely that when more scientific methods of utilization are adopted, this lignite may be a very valuable asset. South Africa has a flourishing coal export trade from the Natal mines, and Durban is now one of the most important coaling ports of the Indian Ocean, from which coal for bunkers is exported to ports such as Aden, Bombay and Calcutta. Australia also exports several million tons each year from the coalfields in New South Wales. The coalfields of India produce at present a supply approximately sufficient for home demands but the quality is not suitable for ships.

PETROLEUM RESOURCES

The petroleum products, petrol, fuel oil, the lubricating oils and greases, etc., are to-day essential to the prosperity and security of all great nations. Without them, their land, sea and air forces and a large part of their civil transport would be immobilized. Hence, the situation of the sources of supply,

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their availability in war and the protection of the oil *en route* to the regions where it is required are matters of supreme importance.

At the present time the chief world sources are as follows :—

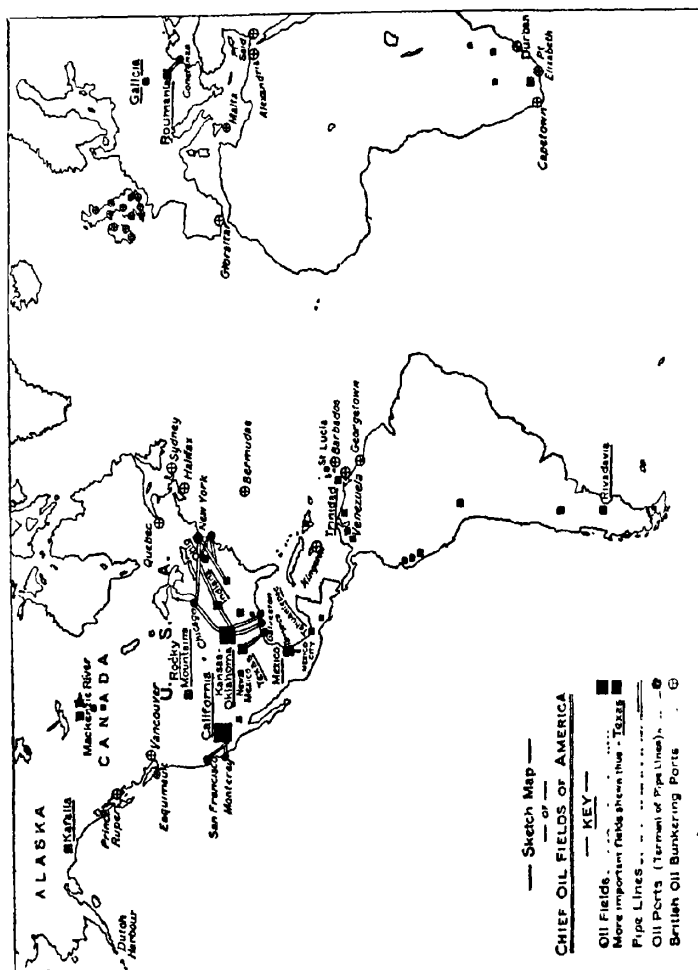
<i>Country</i>	<i>Production (1935) in millions of tons</i>				
U.S.A.	135
Russia	24
Venezuela	22
Rumania	8
Iran	7
Dutch East Indies...	6
Mexico	6
Colombia, Peru and Argentina	8
Iraq	4
Trinidad	2
Assam and Burma	1
Poland	·5
Sarawak	·3
Japan	·3

From these figures it is evident that the United States produces over 60 per cent. of the world's total, and that the British Empire, even if we include the Anglo-Iran oilfields in South-West Iran, only produces about 5 per cent. Indeed, the aggregate production of the British Empire, including the Anglo-Iran and Iraq oilfields, is only five million tons more than the amount required annually by Great Britain alone for normal peace time requirements. Nevertheless, the oilfields under British control are of special importance to us, and their situation and defence problems require consideration.

The Anglo-Iran Oil Company, which holds a concession from the Iranian Government, to whom it pays a royalty on the gross tonnage of oil produced, is a British concern in which the British Government has a majority interest. Its chief oilfields are at Masjid-i-Sulaiman and Haft Khel, both of which are in the province of Arabistan in South-West Iran. The two fields are connected by pipe lines, with the refineries at Abadan, 150 miles to the south. At Abadan, 4 square miles accommodate a tank farm with a storage capacity of 2 million tons, the refinery with an annual throughput of 5½ million tons and a loading station and residential area. Some of the oil is, however, transported in its crude state to other refineries of the Company at Swansea.

It is obvious that the defence of these oilfields, the pipe lines, the various pumping stations, the refinery at Abadan and the port of Mohammerah, all of which are in Iranian

The Anglo-Iran Oilfields



MAP 2.—Sketch Map of Chief Oilfields of America.

territory, depends not merely on satisfactory relations with the Iranian Government and with local tribes, but also on our position in Iraq. Hence, the alliance made between Great Britain and Iraq in 1930, by which we are enabled to maintain air bases and forces in that country until 1957, has an important bearing on the defence of the Anglo-Iran oilfields. It ensures for us a satisfactory port (Basra) and a base of operations in that region.

The principal Burma oilfield is at Yenangyang, 272 miles north of the refinery at Rangoon, with which it is connected by a pipe line. The Singu and Yenangyat fields, thirty and sixty miles farther north respectively, are also important. From these three fields comes 80 per cent. of the total production of India, and most of the oil produced is sold in the Indian market.

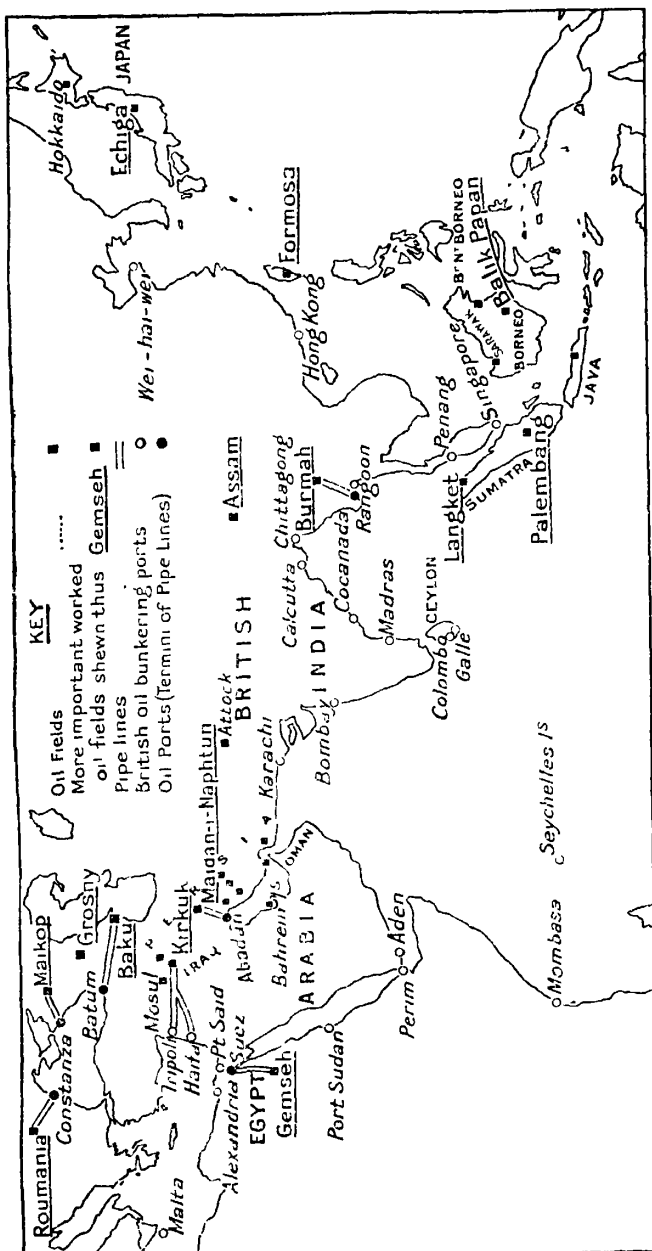
In Assam there are oilfields of minor and mainly local importance at Digboi, Bappa Pung, Makum and Baderpur.

Both the Assam and Burma oil areas are in regions where external attack by land is improbable. The proximity of the latter to India and to Singapore makes it of great strategic importance; adequate supplies could be obtained from the refinery at Rangoon to fuel a fleet based on Singapore. The long stretch of the pipe line from the fields to Rangoon would, however, be vulnerable to sabotage and might, in the event of internal security troubles, require protection.

The Miri and Bakong oilfields in Sarawak, worked by the Shell Company in conjunction with the Royal Dutch Company, have developed during the last few years into an important source of supply. Like the Burma fields, they are of special strategic importance owing to their comparative proximity to Singapore.

The situation of the Trinidad oilfield near one of the main routes to the Panama Canal, makes its productiveness in oil of great value, from a commercial point of view, but it lies in an area where American naval power is predominant. Much prospecting has been carried out in the neighbouring island of Barbados, with indifferent success.

The oil-bearing districts of Gemseh and Hurghada lie on the west shore of the Red Sea near its junction with the Gulf of Suez. The war gave an impetus to the development



Map 3 —Sketch Map of the Chief Oilfields of the Near East and East, and British Bunkering Stations.

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of these wells, as a natural supply of oil near the Suez Canal was an invaluable asset. Unfortunately, since the stimulus of the war has been removed, the quantity of oil obtained has been gradually declining, but there is still a possibility of some development in this region. The shores of the Sinai Peninsula, moreover, are being prospected and traces of oil have been discovered.

The small Attock oil field is of importance chiefly in view of *Attock* its proximity to the North-West Frontier.

The oil resources of Iraq are being developed by two *Iraq* companies, the Iraq Petroleum Company and the Khaniqin Company, the latter being a subsidiary company of the Anglo-Iran Oil Company.

The Iraq Petroleum Company is operating under a concession, given in 1925 for 25 years, to exploit the oil resources in the whole of Iraq, except the area known as "The Transferred Territories" and the Basra Vilayet. Participation in the company is divided equally between four groups: namely (1) The Anglo-Iran Oil Company, (2) The Royal Dutch Shell Company, (3) Seven of the principal American companies including the Standard, (4) Sixty-seven French companies. The two British groups (1) and (2) hold about 50 per cent. of the shares; the American and French groups (3) and (4) hold about 25 per cent. each. The major interest in the company is therefore British, and an agreement between the groups stipulates that the chairman shall be always British.

Considerable success has been met with in the drilling operations, particularly near Kirkuk, and the company, in accordance with an agreement between the French and British Governments, has constructed a double pipe line from the oil region at Kirkuk across about 600 miles of desert to the Mediterranean. The line runs from Kirkuk to Haditha on the Euphrates where it bifurcates, a French branch passing through Palmyra to Tripoli and a British branch running through Transjordan to Haifa.

The Khaniqin Company is developing that part of Iraq near Khaniqin which is known as the "Transferred Territories." The Naft Khanah oilfield in this area is now producing a considerable quantity of oil and a pipe line has been

laid to a refinery at Alwand near Khaniqin. It is likely that this field may also be connected up eventually with the pipe line of the Iraq Petroleum Company to the Mediterranean.

Another field, west of the Tigris, is being exploited by the British Oil Development Company, which obtained a concession for this purpose in 1932. Though German, Italian, and French financial interests are associated with this company, as well as British, it is embodied in the contract with the Iraq Government that the control of the company shall remain in British hands.

The question of the defence of these oilfields which lie near the northern and eastern frontiers of Iraq, and of the pipe lines, cannot be separated from the defence of Iraq as a whole and will be considered in the section on that country.

*Australia
and New
Zealand*

Efforts to find oilfields in Australia and New Zealand have failed almost completely. Small traces of oil have been found in many places, but it has not been discovered in paying quantities. Oil gas, however, has been found in Queensland at Roma, and is estimated to exist in large quantities. From this gas, petrol can be produced and sold at a profit. New South Wales too, has a growing oil shale industry—the type of shale being a torbanite with a high percentage of petrol.

Canada

The production of oil in Canada is mainly from the Tilbury and Romney fields in Southern Ontario. These produce 90 per cent. of the total quantity found in the Dominion; though smaller amounts are obtained from New Brunswick and Alberta. In addition to oilfields, Canada, however, possesses natural gas wells, which produce a gas that can be used for heating and lighting. These gas wells have a further importance because 3 per cent. of the gas is helium,¹ which can be utilized instead of hydrogen for airships. There are also undeveloped oilfields on the Mackenzie River basin.

*The weakness
of the
British
position*

It is evident from the foregoing that the present production of oil within the Empire is insufficient for the needs of Great Britain alone, and that the British Empire is therefore largely dependent on foreign sources. It is also true that the increased use of oil in its various forms has not merely affected adversely the coal industry of this country, but has necessitated

¹ Helium, unlike hydrogen, is non-inflammable but much more expensive

the construction and use of a large number of oil tankers which carry a useful load in one direction only and return practically empty to the oil sources. As far as Great Britain is concerned, this implies that a considerable and increasing tonnage of our shipping which consists of tankers¹ is not capable of general utility purposes, but is only useful for one-way traffic. Further, a large part (over 90 per cent.) of the oil produced from fields under British control comes from the east, and its most direct route to the British ports is through the Mediterranean, a sea where tankers might be severely subjected to submarine and air attack. Indeed, if that sea were closed to our ships, the Iraq oilfields with their pipe line to Haifa would be practically useless as there is no alternative route by which the oil could be moved in bulk from Kirkuk.

These facts have led to some apprehension with regard to the security of our oil supplies in another war, and, combined with the depressed condition of the coal industry, have produced a body of opinion desirous of reducing our dependence on oil in both the British Navy and Mercantile Marine. As regards the Navy, however, a change over from oil to coal could not be carried out without an enormous sacrifice of efficiency. It would entail increased difficulty in fuelling; it would necessitate considerable increases in the personnel required for stoking, etc. (in a capital ship about 200 extra men); it would greatly reduce the capacity for getting up speed quickly in an emergency; it would diminish the range of ships by about 30 per cent., as the heating power of 1 ton of oil is approximately equal to that of 1·3 tons of coal; and it would make smokelessness and smoke control (*e.g.*, the production of a smoke screen) much more difficult, thus sacrificing one of the most valuable tactical expedients in modern naval warfare.

Further, serious though the position is, it is not an impossible one nor, indeed, is it much worse than that of France, Germany, Italy or Japan. Our oil resources are, for the most part, not developed to full production, and we have also large financial holdings in many foreign oilfields, particularly in Central and South America.² It is unlikely that the British

¹ Three million tons.

² British investments in oil enterprises abroad amount approximately to £140 millions.

Empire would be cut off from all foreign sources at the same time during a war. Moreover, for operations in the Mediterranean, oil supplies would be at least as readily available for Malta (from Haifa) as would coal supplies from Wales, while for a fleet based on Singapore the Burma and Sarawak oilfields are much more convenient than the Welsh coalfields. In fact, if the problem is examined, it is evident that the chief danger would lie in a war similar to the last, in which Great Britain itself would be blockaded, viz., a European war, and hence any measures which can be taken in this country to devise satisfactory substitutes, to ensure adequate reserves and to stimulate the home production of oil are of great importance.¹

(1) *Substitutes*

As regards possible substitutes, finely pulverized coal mixed with oil appears to give fairly satisfactory results as a fuel in ships. The labour of stoking is reduced to a minimum; there is flexibility of speed as in the case of oil fuel; and inferior and hence cheaper varieties of coal can be used. It requires, however, the use of pulverizing machinery on board ships, and is therefore unlikely to come into general use except under circumstances where our oil supplies are greatly restricted.

As a substitute for petrol, benzole produced in our gas works is already widely used and some 200,000 tons are marketed annually in this country. This represents roughly one-twentieth of our present requirements of petrol for Great Britain. Alcohol, mixed with other suitable fuels such as ether, benzole or petrol, can also be used in internal combustion engines, and the mixture, known as Power Alcohol, is widely used in South Africa and Australia. The production of crude alcohol from vegetable waste is, however, not so likely to develop on commercial lines in Great Britain as in tropical countries where there is luxuriant vegetation.

Other possibilities which were made use of during the last war are Producer Gas and coal gas in containers, which can be adapted for the ordinary commercial vehicle.

(2) *Reserves*

Adequate reserves for the essential needs of the services and of civil transport are obviously desirable, and it is evident that these reserves should be maintained if possible in regions where air attack is improbable, and in storage tanks which

¹ There is a case for designing vessels of our merchant navy so that they can burn either coal or oil. A committee is at present considering the advisability of this.

are not visible from the air. In this connection, it is unfortunate that London is our chief oil port and that large reserves are kept in its vicinity.¹ Considerable reserves are maintained also at most of our other important ports, notably on the Clyde, and at or near the various naval bases. It is probable that, altogether, the stocks of petroleum in this country amount at any time to about $2\frac{1}{2}$ million tons or about three months' supply under normal peace time circumstances. In France, all dealers in petroleum must keep a three months' supply and thus a large reserve, additional to military and naval reserves, is ensured, and Japan has recently followed a similar line in Manchuria.²

About 200,000 tons of petroleum can be obtained annually from the Scottish oil shales, and no doubt this quantity could be increased if necessary, provided cost were a minor consideration. ^{(3) Home production of oil from coal}

Petroleum can also be obtained from coal by the Low Temperature Carbonization method, and a number of companies are developing this process. From a commercial standpoint its weakness is that only a few gallons of motor spirit, fuel oil and lubricating oil can be obtained from one ton of coal, and that the residue, a semi-coke which will burn in an open grate, must be marketed at a price equal to the price of high-grade coal if the process is to be successful financially.

Another process which appears to be promising is the Hydrogenation process, by which 1 ton of petrol can be obtained from about $3\frac{1}{2}$ tons of coal. This method is capable of producing our total requirements of petrol (4 million tons) from about 14 million tons of coal, and is likely to be able to compete financially with imported petrol, provided it receives a subsidy in the form of tax remission. In 1933, the British Government passed a bill granting a remission of part of the tax on all home-produced motor spirits and oils, and Imperial Chemical Industries immediately proceeded with the erection of a large-scale hydrogenation plant at Billingham. The plant was ready in 1935 and now produces 100,000 tons of petrol a year, using in the process 350,000 tons of coal and giving employment to 1,000 miners and 7,000 other persons. It is anticipated that the loss to the revenue

¹ At Thames Haven, Chatham, Sheerness, etc.

² And with foreign oil companies in Japan itself.

owing to the remission of tax will be largely balanced by savings owing to increased employment.

It is expected that this large-scale experiment will point the way to further economies in production, and that other plants will be erected in due course. Obviously, in the event of a war with European Powers, these various plants would require protection against air attack, and their situation must be determined with this in view as well as by proximity to mine heads.

(4) *Home
production of
oil from oil
fields*

Another line of attack on this problem is to discover, if possible, oilfields in Great Britain. Geologically, they are likely to exist and several companies, including the Anglo-Iran Company are engaged in boring, under government license, for oil in Sussex and Derbyshire.

THE POSITION WITH REGARD TO RESOURCES OF SHIPPING

The following table shows the outstanding position which Great Britain still holds in regard to sea transport, as compared with other nations :—

Country	Gross Tonnage of Shipping (Steam and Motor) in millions of tons	
	1914	1936
Great Britain	18.9	17.2
British Dominions	1.6	3.0
United States (Sea and Lake) . .	4.3	12.0
Japan	1.7	4.2
Norway	1.9	4.0
Germany	5.1	3.7
Italy	1.4	3.1
France	1.9	3.0
Holland	1.5	2.5
Other Countries	7.4	11.3
Total	45.8	64.0

It also illustrates, however, the fact that the British superiority in tonnage is not so marked as it was in 1914. Then, the British Empire owned 20.5 million tons or almost 45 per cent. of the world's total; to-day it owns 20.2 million tons or about 31 per cent. of the world's total. As regards Great Britain alone, there has been a decrease of over $1\frac{1}{2}$ million tons, though the population of this island, which has to be fed and supplied with raw materials largely from overseas, has increased in the interval by 2 million people. Further, more of our tonnage consists of tankers and of large passenger liners than was the case in 1914. Our position, therefore, if another

war similar to the last were to break out in the near future would not be so favourable as it was in regard to available tonnage in 1914.

Further, the number of British seamen has fallen from 178,000 to 100,000.

On the other hand, however, 10 million tons of the British shipping is under fifteen years old. This represents about 45 per cent. of the total shipping of the world which is under that age,¹ a fact of some importance as it implies that our vessels on the average are more efficient than those of most other nations. Further, we are still the chief builder of ships in the world, and, in spite of the present state of trade, four out of every ten ships under construction to-day are being built in British yards. (200 cargo-vessels in the last seven years have been built in Britain.)

The capacity of our shipbuilding industry is about 2 million tons of new shipping a year which is about half the aggregate capacity for the whole world. In 1914 its capacity was over 3 million tons, but it was seriously hit by the economic depression; the eventual rationalization of the industry led to the closing down of many of the smaller yards and the dispersion of their skilled workers and draughtsmen.

Nevertheless our position is unique in sea-transport, and, apart from its direct advantages in providing us with the cheapest form of transport, is of great service from financial and defensive aspects. Our central position and our function as chief carriers on the sea have made us the hub of world transport, with all the associated financial and trade advantages which that entails. London banks, brokers, shippers, insurance companies and underwriters serve not merely the needs of the British people, but the needs of a large part of the world; and the payment, which the world makes to us for the shipping and other services that we render, forms a large part of those "invisible exports" which help to balance our national account of imports and exports and thereby to maintain and build up our credit abroad. Further, our ownership of so large a share of the mercantile marine of the world gives us not merely a reserve of man-power and of vessels which can be used by the Navy in time of war but also a reserve of the

¹ British share of really up-to-date cargo-vessels is nearly 60 per cent.

specialized and technical industries, manufactures and equipment associated with the construction and maintenance of shipping.

Finally, in time of war, our ownership of about 30 per cent.¹ of the world's shipping enables us to exercise a supervision over the cargoes carried and routes taken by a large part of the world's mercantile marine. It also provides us with a valuable economic weapon. Most of the important countries of the world are dependent in some measure on British shipping, and, in time of war, this dependence does not immediately cease. A threat, therefore, of a withdrawal of our shipping services from a country so situated is a powerful instrument in political discussion. Further, the facilities built up in association with our shipping services, such as docks, radio and cables, etc., are of service to our Navy in time of war.

A COMPARISON WITH OTHER COUNTRIES

Great Britain is not alone in its dependence on imports; this dependence, as a table at the end of this chapter shows, is shared in varying degrees by other nations.

France

France, with 2·2 acres of arable land *per capita*, is not entirely self-supporting and must import about 5 million tons of food each year. She has sufficient iron, bauxite and potash but her coal supply is inadequate, and she depends on external sources (chiefly on Great Britain) for one-third of her total requirements of this essential commodity. Like Great Britain, she obtains from overseas the great bulk of the cotton, silk, wool, oil seeds, rubber, petroleum, copper, lead, tin, manganese, and a host of other substances which she requires in her industries. Her imports of raw materials amount to 40 million tons, are mostly shipborne and come from sources mainly outside the Mediterranean.

Italy

Italy, with only 1·3 acres of arable land *per capita*, is partly dependent on external food supplies, though every effort is being made to make her self-supporting. She has practically no coal and imports normally from 7 to 10 million tons a year. She has, however, abundant water-power. She is singularly deficient in minerals, except sulphur, zinc, lead, bauxite and mercury, and must import her requirements from

¹ U K share of world tonnage, over 4,000 tons and under 25 years of age is nearly 37 per cent

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other countries. The basic commercial materials, cotton, wool and rubber, are imported. Like France, her sources of supply for these imports lie chiefly outside the Mediterranean Sea.

Japan has less than .3 acres of arable land *per capita* and is *Japan* compelled to import a great and increasing quantity of rice, wheat, beans, peas, etc., chiefly from Manchuria. She is also largely dependent on foreign countries for the raw materials of industry. Cotton from India, wool from Australia, petroleum from Borneo and the Dutch East Indies, iron and coal from China, iron ore, tin and rubber from the Malay peninsula are some of the vital commodities which she must obtain from abroad. She is fortunate in the respect that the essential food imports and also the coal and iron can be obtained by a short and well-guarded line of sea communication.

Germany has only 1.1 acres of arable land *per capita*, and, *Germany* in spite of careful cultivation normally imports a considerable tonnage of food. She has ample supplies of coal and potash and is endeavouring to produce her requirements of petroleum from coal. She has supplies, though not quite sufficient, of iron, lead and zinc. She is completely deficient in vegetable oils. At present, the German Government is doing everything possible, by encouraging the use of substitutes, by rationing and by the maintenance of reserves to ensure that Germany would have a two years' supply of all essentials in the event of another war.

The United States is fortunate in being self-supporting in *The United States* all important food supplies except meat, sugar and coffee. Whether the home supplies of other foodstuffs can keep pace with the growth of population is, however, open to question. With regard to raw materials for industries, she imports large amounts of wool, timber, hides and skins and is absolutely dependent on external sources for rubber. She is the world's chief producer of coal, iron, copper, lead, zinc, silver, petroleum, phosphates and salt, but is dependent on external sources for manganese, nickel and tin. The degree of dependence on long lines of sea communication is, however, lessened by the fact that most of the commodities which she lacks could be supplied from some part of the American continent. Thus nickel from Canada, tin from Bolivia, hides and

skins and wool from the Argentine, sugar from the West Indies and rubber from Brazil could be used to meet her needs without going further afield.

*The British
Empire*

The British Empire possesses sources of strength unshared to any great degree by other countries. First, it has a predominant position with regard to wheat, wool, cattle, sheep, tin, rubber, gold, nickel, platinum and manganese which would enable it to handicap an enemy or influence a neutral. Secondly, its ownership of 30 per cent. of the steam and motor shipping of the world allows it to supply its own needs, carry for other countries and maintain a large reserve of technical resources and skilled man power for the Navy. Thirdly, its financial control of sources in many foreign lands assists it in making arrangements for supplies and credit in time of war. And finally, the predominance of the British Empire in the coal bunkering trade of the Mediterranean, the North Sea, the South Atlantic and the Indian Ocean, combined with its ownership of many coaling ports in these seas, enables it to supervise and control to some extent, during war, the movements and cargoes of neutral shipping. The most serious deficiencies—petroleum, potash, antimony, mercury, molybdenum, sulphur, silk, flax, hemp and cotton—may be remedied by the discovery of new Empire sources.

RAW MATERIALS AND COLONIES

It is desirable to examine briefly here the demands for colonial expansion which are being made openly by Germany and other so-called "have-not" Powers. These demands are based on economic, political and strategic grounds. The economic grounds are the desire for sources of raw materials, markets and outlets for surplus population under their control and also to give scope for national enterprise and energy; the political grounds are national prestige, the wish for a share in the administration of backward peoples to which they believe their national qualities are entitled, and the desire for outlets for their young men in colonial services; the strategic grounds (on which for obvious reasons less stress is laid) are the desire to be more secure in the case of economic sanctions being imposed on them, the possibility of raising native armies and of establishing overseas naval and air bases.

With regard to the value of colonies as outlets for surplus population, they are almost entirely situated in the tropics and even those with high plateau areas, such as Kenya and Tanganyika, are never likely to be intensively settled by races from temperate climates. Altitude and other factors, such as the high degree of sunlight, are physical barriers against close and permanent settlement by such races as are not biologically suited to these conditions. Indeed, it is a remarkable fact that, though Africa has been the scene of European penetration for half a century, the total white population in its tropical parts to-day is less than the annual increase in Italy alone. All the areas of the world which are capable of holding much larger populations of European or Japanese stock are already self-governing states. At the same time, however, it must be admitted that certain areas—Abyssinia, Kenya, Tanganyika, Nyasaland, Rhodesia and South-West Africa—could be more closely settled than they are to-day.

As regards sources of raw materials the desire for colonial possessions is understandable on several grounds. Ownership and control of territories possessing raw materials would enable these products to be purchased in the currency of the owner country instead of in gold or in credits obtained by foreign trade. This would be a great advantage in a world in which economic nationalism and high tariff barriers are restricting foreign trade in all directions. The owner country would not be liable to preferential import duties on its products ; it could, if it liked, restrict exports largely to its own markets ; it could restrict production in order to maintain prices. Further, colonial possessions offer scope for the investment of capital in areas in which control can be exercised ; the dividends on that capital come back to the owner country ; and contracts for the construction of public works naturally go to firms in the owner country.

On the other hand, however, the colonial areas of the world produce only a very small percentage of the staple raw materials of industry with certain exceptions. The most important of these exceptions are vegetable oils (Nigeria), copper (N. Rhodesia), rubber and tin (Malaya and the Dutch East Indies). If all the pre-war German colonies were returned to Germany the result in tons of raw materials for her industries would

not represent more than 2 per cent. of her total requirements. Moreover, by the terms of Class A and Class B mandates, the previous territories of Turkey and the most important of the previous colonies of Germany are open to trade and enterprise on equal terms to all members of the League and even, by agreement, to non-members as well. Only in the case of South-West Africa and the Pacific mandates, which are class C, can the mandatory Power erect differential tariff barriers against foreign countries. At the same time it is just to remark that trade follows the flag and that in most cases the mandatory Power has acquired the greater share of the trade.

But even if it were desirable, on economic grounds, to return to Germany all or some of the mandates, there are other matters to be considered. As long as Britain holds firmly by her policy of trusteeship for the native races which she controls, there is the difficulty of transferring them to Powers whose attitude might be one of frank exploitation. Such transfers could not take place without the assent or indifference of the native populations concerned. Further, there would be strong arguments against the possible growth of Nazism or Fascism among the African peoples. But, most of all, there is the danger that such transfers, so far from diminishing the danger of war would lead to increased anxiety and tension. The Union of South Africa would not consent to the return of an aggressive Germany on her north-western flank ; Australia would strongly resist a return of New Guinea to Germany, particularly now that that country has an alliance with Japan ; there would be a general anxiety lest the returned territories would be used as bases for military, air and naval forces, or as excuses for the expansion of such forces. Nor would the British public view with equanimity the return to Germany of Tanganyika, which occupies the centre of the British corridor along the eastern side of Africa.

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POSITION OF THE GREAT POWERS WITH REGARD TO RAW MATERIALS

		Gt. Britain	Gt Britain & Colonies ¹	British Empire	U.S.A and Depen'cies ²	France and Colonies	Germany	Italy and Colonies	Japanese Empire	U.S.S.R.
Metallic Minerals	Iron	—	—	0	0	+	—	—	—	0
	Copper	—	—	0	+	—	—	—	—	—
	Lead	—	—	+	0	—	—	0	—	—
	Zinc	—	—	0	0	—	—	0	—	—
	Tin	—	+	+	—	—	—	—	—	—
	Aluminium	—	0	0	—	+	—	0	—	—
	Manganese	—	+	+	—	—	—	—	—	+
	Nickel	—	—	+	—	0	—	—	—	—
	Mercury	—	—	—	—	—	—	—	—	—
	Tungsten	—	—	0	—	—	—	+	—	—
	Chromium	—	—	+	—	0	—	—	—	—
	Platinum	—	—	+	—	—	—	—	—	—
Non-Metal- lic Minerals	Coal	+	+	+	+	—	+	—	0	+
	Petroleum	—	—	—	+	—	—	—	—	+
	Asbestos	—	—	+	—	—	—	—	—	+
	Sulphur	—	—	—	+	—	—	+	+	—
	Phosphates	—	0	0	+	0	—	—	—	0
	Potash	—	—	—	—	+	—	—	—	0
Textile Fibres, etc	Rubber	—	+	+	—	+	—	—	—	0
	Cotton	—	—	—	+	—	—	—	—	0
	Wool	—	—	+	—	—	—	—	—	—
	Silk	—	—	—	—	—	—	+	+	0
	Flax	—	—	—	—	0	—	—	—	+
	Jute	—	—	+	—	—	—	—	—	—
	Hemp	—	—	—	—	—	—	—	—	0
	Veget Oils	—	0	+	+	0	—	+	—	0
	Timber	—	—	0	0	—	—	—	—	+

+ = Exportable Surplus.

0 = approximately self-sufficient.

— = Partly dependent on outside sources

— = Largely or entirely dependent on outside sources.

¹ Colonies, Protectorates and Mandates India and Southern Rhodesia are excluded.

² Excluding the Philippine Islands

LEADING PRODUCERS OF PRINCIPAL FOODSTUFFS

PERCENTAGE OF WORLD PRODUCTION OF PRODUCERS RESPONSIBLE FOR MORE THAN 5 PER CENT.

	%	%	%	%	%	%	%	%	%	%	%	%
Wheat	U S S R	21	U S A	11	France	7	India	7	Italy	7	Argentina	6
Beef*	Argentina	56	Uruguay	12	Australia	10	N Zealand	10	Brazil	6	Canada	6
Mutton*	N Zealand	57	Australia	18	Argentina	18	Holland	12	U S A	6		
Pork*	U S A	22	Sweden	15	N Zealand	12						
Ham, Bacon &												
Salted Pork*	Denmark	57	Holland	12	Poland	9	Canada	9	U S A	6		
Cheese*	N Zealand	38	Holland	24	Canada	12	Italy	12	Switzerland	7		
Butter*	Denmark	27	N Zealand	24	Australia	17	U S S R.	17	Holland	5		
Cane Sugar	India	20	B W Indies	15	Philippines	10	Mexico	6	Hawai	6		
Beet Sugar	Germany	21	U S S R	16	France	12	U S A	12	U K	7	Czecho-	5
											Slovakia	6
CitrusFruits*	Spain	49	Italy	20	Palestine	7			Colombia	7	Formosa	7
Bananas*	Honduras	25	Jamaica	11	Brazil	9	Canaries	8			Guatemala	6
Coffee	Brazil	71	Colombia	8								
Tea ¹	India	42	Ceylon	24	D E I	18						
Cocoa	Gold Coast	41	Brazil	14	Nigeria	11	Fr W Africa	7				
Tobacco	India	28	U S A	28	U S S R	8	Brazil	5				

* = Net exports

¹ Excluding China for which figures are not available

The figures are for the year 1933, except in the case of Beet Sugar (1934).

CHAPTER VI

GREAT BRITAIN AND THE HOME WATERS

GREAT BRITAIN, it has been seen, is the link between the self-governing communities which form the British Commonwealth of Nations and the 6½ million square miles and 400 million people which comprise the Dependent Empire. It is the chief base of homogeneous, literate and skilled man power, the chief manufacturing base, the hub of communications, and the most important market. It owns nearly one-third of the world's shipping and over 80 per cent. of the sea transport of the whole Empire; and is the financial centre where banking and insurance connected with trade and transport are carried out on an unrivalled scale. It is the only creditor nation in the British Commonwealth of Nations capable of financing development and defence in a large way. It alone, of all the countries of the Empire, maintains a large navy to protect the oceanic communications, and military and air forces which are available for service anywhere in the interests of the several parts.

Its problems of defence fall under two main headings: *Its problems of defence*
(1) the defence of its sea communications which are essential for the flow of food-stuffs and raw materials required by its people, and the movement of troops, reinforcements and supplies to or from other parts of the Empire. (2) The protection of its centres of administration, population and industry, its munition bases, military camps, aerodromes and vital internal lines of distribution and transport against air attack. To these two major problems must be added the preservation of internal security, the maintenance of morale and prevention of panic in time of war or threat of war. Invasion may be disregarded as a practical contingency except in the event of a complete breakdown of our naval, military and air defences, i.e., in the event of complete defeat.

*Sea Com-
munications*

The defence of sea communications can for convenience be considered under three headings. (a) The defence of our sea communications outside air range of Western European Powers, viz : outside the Home Waters. (b) The defence of our sea communications within air range of European Powers. (c) The defence of our naval bases and ports in Great Britain and Ireland. Obviously these are not, in reality separate and unconnected problems, for it would be impossible to ensure (a) unless both (b) and (c) were maintained, and conversely (b) and (c) would avail little if our supplies were cut off by naval action at a distance from this island. It is, however, convenient to consider them separately for the sake of clarity.

(a) *Outside
air range
from land
bases*

Before considering the first it is necessary to decide on the answer to the important question—what is the air range of modern aircraft operating over the sea from land bases? No final answer can be given to this question which will hold good permanently, but it may be said that, at present a limit of 500 miles from the European coast line would be generous, taking into account weather conditions over the sea such as strong winds, the necessity for carrying a sufficient load of bombs and petrol, and detours to avoid detection or to find ships to attack. If this assumption is accepted, then a simple exercise with a map and pair of compasses will show that the range from German territory would include the whole of the North Sea and English Channel and also—but only if flight across England were possible—the west coast ports as well. If the enemy air bases were situated in the Low Countries then the whole of the Irish Sea and St. George's Channel would be within air range but only, as before, if the enemy's force could fly across England. If Northern France including Ushant were a base for attacking us, all the approaches to the Home Waters would be within air range and the danger zone would be extended to about Longitude 15° W. But outside this area, unless the enemy could obtain bases in Ireland, our sea communications in the Atlantic would not be subject to the combined dangers of naval and air attack (except the minor danger of attack by aircraft from enemy aircraft carriers). The defence therefore in these outer waters is essentially a naval problem only, and must be ensured by adequate naval

forces, assisted, of course, for reconnaissance, etc., by the Fleet Air Arm.

Within air range of potential enemy bases in Europe the problem increases in complexity, for then there is the added danger of air attack upon our ships. Every important port in Great Britain must be approached by one or other of four comparatively narrow entrances, the English Channel, the northern gateway to the North Sea, the Irish Channel and St. George's Channel, and vessels when nearing or leaving this island must follow narrow and well defined routes. They are therefore more easily detected and more liable to surface, under water and air attack, than when on the open ocean. The responsibility for defending them is shared in this case by the Navy and the aircraft of the Coastal Command, the closest co-operation being necessary to ensure the adequate protection of convoys or important single vessels. It is evident, however, from the previous paragraph that this danger of air attack refers mainly to the English Channel and the North Sea and in a much less degree to the western approaches. This is, obviously, a point of such importance that its implications must be examined more closely in a later section.

Naval defence is impossible, however, unless the Navy has safe bases and anchorages from which it can operate and where vessels can be repaired and refitted. Its shipbuilding yards should be immune from attack by sea or air. Other things being equal, therefore, the previous paragraphs would lead to the conclusion that our naval bases and anchorages should all be on the west coast and in Ireland, but this is, of course, impossible for several reasons. It would be difficult and costly to move our east and south coast bases, such as Chatham, Portsmouth and Plymouth, whose situations were chosen for the purposes of defence against Holland, Spain and France; no matter how great the risks may be they are still desirable to enable the Navy to keep a closer grip on the English Channel and North Sea than would be possible from more remote bases. Thus there is little chance of any radical changes being made in the semicircle of bases—Devonport and Portsmouth (fleet bases); Chatham and Sheerness (cruiser bases on the Thames estuary); Rosyth in the Firth of Forth and Invergordon (fleet bases) which lie central to the

(b) *Within
air range
of land
bases*

(c) (1) *Naval
bases*

whole semicircle of continental coast from Norway to Calais. But, in time of war, these would be supplemented by west coast and Irish bases. Milford Haven (Pembroke Dock), which faces the entrance to St. George's Channel, is at present closed down but could be brought into use ; so also could the great civil ports of Bristol, Avonmouth, Cardiff, Swansea, Liverpool, Barrow, Belfast and the Clyde, for naval as well as civil purposes. As regards naval shipbuilding, some of this is carried on at the Admiralty yards at Portsmouth, Devonport and Chatham, but most of it is done at the great civilian yards at Clydebank, Barrow, Birkenhead, Belfast and Newcastle-on-Tyne, the first four of which are less likely to be subjected to the serious danger of frequent air attack than the remainder.

The ground defences of all the bases and important ports in Great Britain are a responsibility of certain units of the Territorial Army which can be called on to serve in a case of national emergency, even though no order calling up the whole Territorial Army has been brought into force. There are fixed defences at the following : Dover, Sheerness, Shoeburyness, Felixstowe, the Humber, Hartlepool, Tynemouth, Forth, Clyde, Mersey, Severn, Pembroke, Falmouth, Plymouth, Portsmouth and Portland, and—in Ireland—Belfast, Lough Swilly, Spike Island (Queenstown) and Bere Island (Bantry Bay).¹

The reference to the last three raises several points of great importance. They are part of the territory of the Irish Free State, and the relationship between the United Kingdom and that country in the event of war would obviously be, on that as well as many other grounds, a matter of vital interest. As long as harmony prevails between the two countries, the many natural harbours of the latter are available for training and operations. Their great strategic importance to Great Britain was recognized in the Irish Free State Treaty of 1921, in which the coastal defence of that Dominion was entrusted to Great Britain until such time as it could be shouldered by the Irish Free State, and the latter agreed to provide :

“ In time of peace such harbour and other facilities as are

¹ The coast defences in Northern Ireland and the Irish Free State are, of course, a responsibility of regular forces. A Territorial Association in Co. Antrim is being created to assist locally.

indicated in the Annex hereto, or such facilities as may from time to time be agreed between the British Government and the Government of the Irish Free State ; and

“ In time of war or strained relations with a Foreign Power such harbour and other facilities as the British Government may require for the purposes of such defence as aforesaid.”

The harbours referred to in the Annex of the Treaty are the naval anchorages at Berehaven, Queenstown and Lough Swilly, where Admiralty property and rights are retained and the defences remain under British control. Facilities are also retained for coastal defence by air in the neighbourhood of these three anchorages. During the last war Berehaven was used as a convoy assembly and dispersal port for the Atlantic convoys ; Queenstown was the naval base for the anti-submarine flotilla, and Lough Swilly for a short time was a base of the Grand Fleet. Their importance and that of other Irish harbours is not likely to be less in a future war, when their comparative immunity from air attack would be a great asset. Up to the present the Irish Free State has given no indication of desiring to undertake its own coastal defence, though such a desire may be expressed in the future, and would follow closely the line adopted by other Dominions which are responsible for the security of bases in their own territory. On the general question of the use of the territory of the Irish Free State by an enemy power, as a base for attack on Great Britain, the present head of the Government there has stated that under no circumstances will that ever be permitted.

As regards Air co-operation with the Navy and Territorial Army in the defence of bases and the Home Waters there are the various squadrons of the “ Coastal Command,” situated at Calshott, Lee-on-Solent, Mountbatten (Plymouth), Pembroke Dock, Donibristle (Fife), Bircham Newton and Felixstowe. There are also the air units on aircraft carriers or afloat on other fighting ships in Home Waters. There are bases for the latter, which form the Fleet Air Arm, at Gosport, Southampton and Manston.

Ports are the link between sea communications and the system of internal distribution. It is not merely necessary to ensure the safe arrival at our ports of the 60 million tons of food and raw materials which we require annually ; there

(c) (2)
Ports

must be suitable facilities for unloading, storing and distributing. In general, these facilities are possessed by all our great ports, and Great Britain is also fortunate in the fact that no place in this island is more than 100 miles from some reasonably good harbour.

But three important facts must be remembered. First, that ports are developed on specialized lines mainly to deal with certain classes of traffic, and that traffic cannot be switched from one to another, even during war, indiscriminately. It would obviously be unsatisfactory to send cargoes of chilled beef to a port without cold storage or heavy ores to a port which normally deals with wheat, cotton and meat. London, for instance, takes 70 per cent. and Liverpool 20 per cent. of the imports of chilled beef and frozen mutton, and the only other ports with important cold storage facilities are Southampton, Hull and Avonmouth.

Further, the communications from our ports to the interior are merely designed to deal with normal traffic, and any sudden increase would entail the risk of serious congestion. An attempt, for instance, under the pressure of submarine and air attack, to divert east coast traffic to the west coast ports might lead to serious difficulties of distribution and perhaps to fatal delay, unless adequate preparations had been thoroughly planned beforehand.

*The Port
of London*

And, lastly, the outstanding part which the Port of London plays in the whole framework of reception and distribution must be borne in mind. The seven great dock systems, which are under the Port of London Authority, deal with 70 per cent. of the meat, 33 per cent. of the petroleum, 27 per cent. of the wood and timber, 44 per cent. of the wool, 56 per cent. of the rubber, and 45 per cent. of the sugar imported annually into the United Kingdom. In all, they handle about 35 million tons of imports and exports, or about one-third of the total overseas trade of this island. An attempt to transfer this immense volume of traffic to other ports, under pressure of war-time necessity, would be liable to dislocate the whole transport and supply system of Southern England. Two alleviating factors, however, require mention. The great network of arterial roads, constructed since the war, and the resources of mechanical transport now available add greatly to

the elasticity of our distributive system. Further, in time of war, the civilian transport, which normally carries only on its outward journeys, could be organized to carry both ways. It is obvious, however, that the value of the mechanical transport would depend on adequate supplies of petroleum being available. Something might also be done to help by the development of some of our smaller ports so as to avoid the congestion which may ensue if only a few large ports can be used.

The importance of these points needs no emphasis. Every effort would, however, have to be made in the case of a European war to increase the capacity of the west coast ports and to overcome the difficulties in transport and distribution. (In July 1936 the Minister for Co-ordination stated that these matters were receiving the special attention of a Sub-Committee of the Committee of Imperial Defence.)

The second great group of problems of defence is concerned with the defence of centres of population and industry against air attack. The numbers, quality and distribution of the population and the siting of industries have an immediate bearing on this. *The protection of centres of population*

By the last census, the population of Great Britain and Northern Ireland was 44,790,000, which was just a little less than an increase of 2 millions, or 4·7 per cent. over the population of 1921. This rate of increase was less than that of any European country except France and Sweden.

The census of 1931 also reveals that Great Britain is now approaching a time when its population is likely to decrease. The birthrate to-day is so small that it does not even replace the number of children who become adults each year. Thus, to-day, there are 1½ million young people of 19 years and under fewer than there were ten years ago. Were it not for the lower death rate and the longer expectation of life, the decline would have set in already; if the present rates are continued, the population of Great Britain in 1951 will be less than that in 1941. Incidentally, whether such a decline is desirable or not on economic grounds, there is some reason for apprehending that it may be seized on by nations with growing populations as an excuse for disputing the title of Great Britain to vast undeveloped territories abroad.

The population is, of course, mainly urban and industrial. Eighty per cent. of it lives in towns, and 60 per cent. in towns of over 50,000 inhabitants. In spite, however, of a progressive decline in agriculture, to the extent of 10,000 males employed each year, there are still 1,300,000 persons engaged in agricultural work and it is, in respect of numbers employed, the second greatest of our industries after the manufacture of metals, machines and conveyances. Nearly one-quarter of the whole population of the United Kingdom is situated in and round London; nearly half live in England south of a line from the Wash to the Severn, and, with the movement southwards of the lighter industries, the proportion is likely to increase. In short, the south-east corner, its port, its distributing network and its centres of population are yearly becoming more vital to the well-being of the whole land. They are also, of course, the parts which are most vulnerable to air attack.

*The munition
base of
England*

Most of the industrial areas of Great Britain are closely associated with coalfields. Thus, the Clyde area (1), with its heavy iron and steel industries and its shipbuilding, is near the Lanark and Fife coalfields and the Ayr coalfield also. Belfast, too, owes some of its importance to its proximity to these fields. The great engineering works and shipbuilding yards of the Tyne (2) are based on the Northumberland and Durham coalfield. The minor coalfield of Cumberland (3) supports the shipbuilding at Barrow and iron industry at Workington. The Lancashire area (4), which includes Liverpool and Manchester, the second and fourth ports in the United Kingdom, as well as Wigan, Warrington and numerous other industrial centres, has its own coalfield. The York, Derby and Nottingham fields (5), together with the Midland fields of Leicester and Warwickshire, form a long and almost continuous belt of population and industrial activity from Leeds to Leicester. Close to (5) is the South Staffordshire field with the Birmingham area (6). On the northern side of the Severn estuary is the South Wales area (7), the chief source of steam coal for shipping and containing the large smelting and refining industries of Swansea. Close by, on the south side of the Severn, is the Bristol area with a small coalfield.

Omitting the Clyde, Belfast and Cumberland areas, these industrial regions stretch across Britain diagonally in a great belt, between the two lines which join the mouths of the Mersey and the Severn to those of the Tyne and the Humber respectively. This belt is nowhere further than 300 miles from some point on the coast of Europe ; most of it is within 250 miles ; and it is the manufacturing and munition base of England.

London, unlike the other industrial regions, is not associated with coalfields, though the Kent fields are not far distant. Its position, fifty miles up a great navigable inlet, facing the entrances to the Rhine and the Scheldt ; its proximity to Europe by short sea routes ; its intermediate position between the industrial belt of England and the manufacturing areas of France and Belgium have contributed towards making it the greatest port and centre of population in the world. Within a periphery of 250 miles round Charing Cross lies an area of almost continuous streets and houses, inhabited by 10 million people, and situated only 80 miles or so from the nearest point on the coast-line of Europe.

As an industrial area its importance is chiefly in relation to the lighter industries, and there has been a pronounced movement of these from the Midlands and North of England to the London area during the post-war years, attracted, no doubt, by the magnitude of its market. The distribution of cheap electrical power by the Grid may tend to accelerate this movement, and thereby to swell still further the already overlarge population of London and its environs.

It may be assumed that all England, south of a line from the Forth to the Clyde is within the range of modern aircraft operating from European bases, and that the great industrial belt of Great Britain could not expect immunity from air attack in a European war. At the same time, however, it is likely that long detours would be desirable to provide an element of unexpectedness and that attacking aircraft would be subject to increasing losses the further they penetrated over British territory. Hence it is likely that the area which would be most liable to frequent attack would be the part which lies within 200 miles from the European coastline, viz., that part of England south of a line from the Wash to the Severn.

The London Area

Area most liable to air attack

In this area lie London, the administrative and financial centre, the English Channel and the approaches to London, Southampton, Bristol, Avonmouth, Dover and Harwich; the constructional and maintenance bases at Devonport, Portsmouth and Chatham, the Government arsenal at Woolwich, the small arms factory at Enfield, civilian engineering and armament factories on the south bank of the Thames, the most important power and transformer stations of the Grid System, the largest reserves of petroleum, and the great military concentrations round Aldershot and Salisbury.

London, itself, is separated from the coast of Europe by less than one hour's flight, of which at least twenty miles would be across the sea where aircraft could fly with some immunity from observation. Its area is double that of Berlin and three times that of Paris; its population is a much larger part of the total population of the country than is true for these other capitals; it possesses in the Thames an ideal leading mark for aircraft; its normal sky condition of broken clouds favours an attacking force.

The movement of some of these many strategic eggs out of the south-east basket is obviously a matter of the highest importance as is also the placing of new factories, particularly those associated with war-time needs, away from the most vulnerable part of England. A recent move in this direction was announced in the White Paper on Defence, March 1936, in which the decision was made public to move the Government shell-filling and explosives factories from Woolwich and Waltham Abbey to Chorley (Lancs.), Bridgend (Glamorgan), Irvine (Ayrshire) and Hereford. but obviously much remains to be done with regard to the movement of other factories essential to the supply of other necessities.

As London and the south-east corner of England must present the most vulnerable target because of their geographical proximity to Europe, the Air Defence Force of Great Britain is mainly concentrated south of a line from the Wash to the Severn. Thus, the Fighter Squadrons of the Fighter Command, with its headquarters at Uxbridge, are disposed in a ring round London, extending from Duxford in Cambridgeshire to Hawkinge in Kent, to provide—in co-operation with the ground anti-aircraft organization of balloon barrages,

searchlights, observers and guns of the 1st Anti-Aircraft Division and Observer Corps, T.A.—the close defence of the most vulnerable part of England. Behind this ring of fighter squadrons lie most of the Bomber Squadrons of the Bomber Command, which would provide a striking force to act on the offensive if necessary. But the Midlands and north are not immune from danger and hence the defence organization is gradually being extended northwards. The 2nd Anti-Aircraft Division, which is in process of formation, will be responsible for the ground anti-aircraft defences of the Midlands and north, *i.e.*, from the Wash to the Forth. The problems here are less acute as the distance from continental air bases is much greater and the important objectives, except in the case of the Newcastle area, are situated mainly some considerable distance inland; longer warning of an air attack is, therefore, possible and the disposition of the ground anti-aircraft organization *in depth* is more practicable.

THE PROBLEMS OF SUPPLY

It is evident from the previous sections that the problems entailed in the defence of Great Britain against naval and air attack are susceptible of no single, comprehensive and simple solution. They can only be solved by the most careful co-ordination of naval, military, air and civil action. Into this must enter measures for relieving as far as possible the Navy and Air Force of some of its responsibilities in safeguarding the tremendous flow of foodstuffs and raw materials which is necessary for the life and activities of the British people and which can be shut off by attacks on sea routes, ports and lines of distribution from the ports.

The security of our food supplies in war is essentially no more important than the security of our supplies of raw materials, but it presents more complicated problems. Foodstuffs are bulky, require a great tonnage of shipping, and are sometimes liable to deteriorate unless provided with special forms of storage in transit. Careful unloading and storage on arrival are necessary. Arrivals must be regular in order to prevent a glut at one time and scarcity at another.

Briefly, the situation of Great Britain with regard to our food supplies is as follows. The 30 million acres of

*Food
supplies of
Great
Britain*

cultivated land and pasture produce approximately 40 per cent. of the requirements of its inhabitants. We import 55 per cent. of our meat (beef, mutton, bacon, pork, etc.), 75 per cent. of our wheat and flour, 75 per cent. of our sugar, 85 per cent. of our butter, all our tea, cocoa and coffee. Indeed, green vegetables, potatoes, milk and fish are the only important commodities in regard to which we can be self-supporting. We require the safe arrival at our ports, the proper storage and the satisfactory distribution of over 20 million tons of imported food each year.

In time of war no doubt this great total could be reduced somewhat (perhaps by 10 per cent.) by the immediate introduction of rationing and measures directed against unnecessary or wasteful use. The development of home production by breaking up pasture and opening allotments could ultimately increase production, but nature cannot be hurried and the results of measures like these would not be felt under less than twelve months. By then it might be too late. Hence it is desirable that such measures as are practicable should be initiated in time of peace. A policy of intensive economic nationalism, aiming at a self-supporting England cannot have any place among such measures, as its economic and political effects in other directions would be too serious. It would damage our shipping interests, injure and perhaps estrange the Dominions and perhaps seriously depreciate the value of our investments there and in South American States. But a moderate policy devised to stimulate the home production of certain foods, particularly wheat, dairy produce, beef, mutton, vegetables and fruit is possible and, during the last few years, has been carried out on a modest scale with results which have been beneficial to the farmer and to the nation strategically, without raising the expense to the consumer above a level which he cannot afford. The sugar beet subsidy, to which reference has been made, has resulted in a home production of one-quarter of our requirements. The wheat quota, preferential tariffs on vegetables and fruit; centralized activities such as the Milk and Pigs Marketing schemes; the levy on imported meat (with a preference to the Dominions), the proceeds of which will be paid as a subsidy to British producers; are all useful. Since 1932, as a result of these and

other measures, a substantial improvement has been achieved. This country now produces more wheat than it did in 1913, and the production of potatoes, sugar and beef has been increased during the last three years.

But the population of Great Britain has also increased by over 3 million people, while our shipping resources have declined by $1\frac{1}{2}$ million tons since 1914, so that our position, despite these measures, is worse than it was before the war. Much, therefore, remains to be done and the appointment of a special sub-committee of the Committee of Imperial Defence in 1936, to examine the subject from four aspects: the protection of food supplies arriving from overseas, the possibility of increasing food production in this country in case of emergency, the storage of food supplies in emergency and the internal transport system as it would affect the movement of foodstuffs in war, was a recognition of public anxiety. Later, a special official was attached to the Department of the Minister for Co-ordination, whose duties are primarily concerned with the problems of food supplies in war.

Obviously in planning for an emergency the matter of storage must receive careful consideration. At present, apart from our own crop, only about 6 weeks supply of wheat is kept in store in England and that is practically all in silos at our wheat ports. It has been suggested that concrete silos could be constructed inland, at a cost of £10 millions, which would hold a four months' supply, and that these could be kept full at very little extra cost to this country by arrangements with Canadian exporters who normally keep enormous stocks at Winnipeg, Fort William and elsewhere. These could be supplemented by many of the mills which were shut down owing to the nationalization of the industry. Measures to increase the number of cattle and the available amount of cold storage inland, so that a considerably greater supply of meat would be available, are not impossible. Large stocks of canned foods, both vegetables and meat, could be kept, as is now being done in Germany. These and similar measures might be adopted to alleviate the situation, but they can only be carried out in moderation owing to their cost, unless the taxpayer is prepared to pay, if money is not to be diverted from the primary need of maintaining the Services which must

be adequate to protect not merely the food ships but also our supplies of raw materials and the territories and interests of a widespread Empire.

*Raw
Materials*

Raw materials are equally essential. Without them we could not produce the manufactured goods which pay for our imports of food ; nor could the needs of the Services and the nation be provided.

At present our position as regards ores and metals, which are essential to the heavy industries, shipbuilding and munitions, is that we must import about 12 million tons annually, of which iron ore, copper, tin, lead, zinc and manganese form the greater part. Small but essential quantities of other metals and minerals, such as tungsten, chrome, nickel, molybdenite, etc., are necessary for the manufacture of ferro-alloys and other purposes. In time of war our requirements of all these would probably increase, but, on the other hand, local resources, such as British iron and tin ores which are uneconomic to use in time of peace, could be utilized ; measures against waste and arrangements for salvaging and re-using waste metals and minerals could be introduced. With proper planning and organization the situation should not be materially worse.

The same applies to the non-metallic raw materials, such as cotton, wool, rubber, jute, etc., which absorb about 2 million tons of shipping a year, and to timber for pit props, building and railway sleepers, etc. For some of these substitutes may be found. Synthetic rubber is now being produced in quite large quantities in Germany and in some ways is superior to natural rubber but is more expensive. "Lanitol," a substitute for wool made from milk in Italy, is not likely to be produced in this country as our milk supply is not sufficient for more than normal needs and, in any case, it has serious technical defects. The use of home grown timbers for various purposes for which imported timber is usually employed is under investigation at present.

*Chemical
Industry*

The situation with regard to petroleum has been described in Chapter V. Our requirements are rapidly mounting. About half our merchant navy and the whole of our Royal Navy use it. Our imports of petrol (4 million tons) have increased tenfold and our imports of fuel oil, lubricating oils

and greases (6 million tons) fourfold since 1913. Of our total requirements of 10 million tons about 500,000 tons are produced at home from shale or coal. All the rest has to be brought to our shores in tankers. Hence the government subsidy, in the form of the remission of part of the tax, to stimulate the production of oil from coal in this country is a definite military asset. As a result of it both the low temperature process (the Coalite process) and the hydrogenation process (Imperial Chemicals at Billingham) have had the opportunity of expansion and already both the Army and Air Force have been able to use large quantities of home produced motor spirit. By neither process, however, can satisfactory lubricating oils or greases be obtained at present. If success attends the efforts to find productive oil-fields in Great Britain this and many other difficulties will be overcome.

It is in the field of chemical industry that our situation has most improved since the war. Nitrates (from the air instead of from Chile), dyes and a vast range of essential chemicals, which once had to be imported, can now be produced in this country, thus saving about 2 million tons of shipping annually. No less important from a strategic standpoint is the fact that a well organized and adequate chemical industry is necessary in time of war for the production of war materials. Equally, it is clear, that such industries should be near coal resources but at the same time, so situated as to be as immune from air attack as possible.

DEFENCE POLICY

This brief survey of the major problems of Home Defence *Naval* leads to the inescapable conclusion that, despite the development of the Air Arm, British naval needs are still as great as ever. Without an adequate Navy British trade and communications could be strangled outside the air range of modern aircraft by naval action only, and even within air range of land bases in Europe the protection of our shipping must depend mainly on the Navy but with the close co-operation of the Air Force.

Hence naval superiority to any European Power in the Home Waters and Atlantic is still essential to us. When due allowance is made for the need of at least a One-Power

standard in the Mediterranean it is clear that a Two-Power standard in European waters is as necessary as it has been in the past. The Anglo-German Naval Agreement of 1935, by which Germany may have a naval strength of 35 per cent. of the total British tonnage throughout the world, implicitly recognizes this fact, and gives to Great Britain a margin of superiority (quantitatively at any rate) in the Home Waters as compared with the German Fleet, which has to divide itself between the Baltic and North Sea.

Air

Our air needs for Home Defence, apart from those of other parts of the Empire are less easy to determine. Britain is more vulnerable to air attack than any great European Power. Its capital is almost on its frontier ; whereas that of Germany is nearly 300 miles from the nearest point off its coastline and over 400 miles from the North Sea by the most direct route. The policy of the British Government to build our Air Force up to a strength " equal to the strength of any Power within striking distance " of this country is, therefore, a modest one which takes little cognizance of our special geographical circumstances.

*Foreign
Policy*

But these measures alone are not sufficient. Foreign policy and defence must go hand in hand, the former being devised to limit the difficulties of the latter. In the past this fact was recognized in the almost continuous British policy of endeavouring to maintain a balance of power in Western Europe viz. : of preventing by alliances any Power or group of Powers from rising to a position of unchecked dominance there and of supporting the independence and neutrality of Belgium.

Isolation from the affairs of Western Europe is no more and even less possible to-day than it has been in the past. The difficulties of home defence and the problems of the Mediterranean, apart from our numerous social and economic ties with Europe, make it impossible as a practical policy. The independence and neutrality of Belgium are still of vital concern to us not merely because its ports might be made use of as bases for submarine attack on our ships approaching and leaving the Thames, but also because a great Air Power, in occupation of Belgian territory could have its air bases much nearer to our centres of population and industry. Similarly it is still undesirable that any aggressive Power or

group of Powers in Western Europe should achieve a position of unchallengeable strength.

Since the war British policy has, therefore, striven not merely to make Collective Security a reality, but also to supplement this by a regional agreement in Western Europe which would serve these ends. The Western Locarno Treaty (1925), in which Great Britain and Italy, guaranteed to go to the assistance of France or Italy, if they were attacked by Germany or to the assistance of Germany if it was attacked by France, was the result. This treaty, however, had certain weaknesses from the British point of view. It gave no guarantee of assistance to Great Britain; its guarantors could wait until the League had decided who was the aggressor before throwing their resources in on one side or the other. An effort therefore in 1935 to remedy some of these defects by an "Air Locarno" in which a mutual guarantee would be given by all five Powers, Great Britain, France, Belgium, Germany and Italy, to go to the *immediate* assistance of *any* one of them when attacked by Air, met with British approval, but unfortunately failed to materialize owing to the heightening tension in European affairs. Shortly afterwards, Germany, when she violated the demilitarized zone of the Rhine, denounced the whole Locarno Treaty.

The situation to-day is consequently in the melting pot. Temporarily, the Locarno Treaty has been replaced by a British guarantee to go to the assistance of France if she is the victim of aggression by Germany, and by a joint Anglo-French guarantee of a similar nature to Belgium (1937). These are onerous obligations which have truly moved our frontier to the Rhine.

CHAPTER VII

SEA ROUTES AND NAVAL BASES

THE preceding chapters have emphasized the dependence of the various parts of the Empire on its sea communications. They are the channels for the essential interchange of men, goods and services in peace and war, and the security of these communications is therefore the very foundation on which rests the whole structure of Imperial defence.

These communications, taking Great Britain as a starting point, have well-marked characteristics, and follow fairly definite routes of which the following are the most important :—

- (1) Great Britain to the North American ports ; a comparatively short open sea route for most of the way, subject to seasonal diversion owing to climatic causes.
- (2) Great Britain to the East and Australasia, *via* the Suez Canal ; mainly an enclosed route, passing through many maritime defiles and flanked closely in places by other naval powers.
- (3) Great Britain to the East and Australasia, *via* the Cape Route ; a long open sea route, not closely flanked by any great naval power, except in and near the Home waters.
- (4) Great Britain to the Pacific *via* the Panama Canal ; long and open as far as the Caribbean Sea, then enclosed till the Pacific is reached, and finally open again.
- (5) Great Britain to the Pacific *via* Cape Horn ; a long open sea route, comparatively little used to-day for normal traffic, but potentially valuable in war.

In addition to the above, which are the main highways of our ocean traffic, there are the numerous cross routes and feeders, and the lines followed by coastal trade.

Focal Areas A study of map No. 1 shows that there are certain focal areas on these various routes where, owing to geographical or

other causes, sea traffic is more congested than on the ocean highways. These areas are found:—

- (a) Where terminal areas of great importance have access to the ocean routes, *e.g.*, the whole region round Great Britain, the region off the American coast from Cape Race to Sandy Hook ; the River Plate region ; the South-East coast of Australia.
- (b) Where maritime defiles prevent deviation of course and confine the routes to a narrow channel, *e.g.*, the English, Irish and St. George's Channels, the Straits of Gibraltar, the Malta Channel, the Suez Canal, the Straits of Bab-el-Mandeb, the Straits of Malacca, the Caribbean Channels, the Panama Canal.
- (c) Where coaling, fuelling and other facilities, together with a central position, combine to establish a junction of trade routes, *e.g.*, the Canary and Cape Verde Islands, Colombo, Honolulu, the Fiji Islands, Bermuda.
- (d) Where shipping must round a projection of the coast and, to save time and distance, hugs the shore as much as possible, *e.g.*, the Cape of Good Hope, Cape Horn.

It is evident that these focal areas are mainly fixed by factors which are unalterable, and that they are regions where the comparative density of shipping would make attack by sea and air more effective than it can be against vessels dispersed over the ocean routes. Hence they are also the regions which particularly require protective measures.

For the defence of these sea communications the Navy must be capable of protecting the vital sea routes against attack by any enemy or combination of enemy forces. It must be able to provide, in war, a *Covering Force* which can either destroy or contain and neutralize the enemy's main fleet, and thereby give that general measure of security which the Grand Fleet in the North Sea gave to British ships in all parts of the world from 1914 to 1918. It must also provide local Protective Squadrons to ensure safety against raiding cruisers, submarines and aircraft which may evade and slip round the Covering Force. In order that it may discharge these functions the Navy must have bases overseas as well as at home, where the vessels can obtain ammunition and supplies, be docked and repaired in safety, and from

*The Navy
Its Functions*

which they can operate without loss of time. There must also be defended ports, less amply equipped, where refuge can be taken by naval and merchant ships and where supplies of oil and coal can be obtained. Without such overseas bases and defended ports the Navy would be tied to a region round the home waters, would lack mobility and would be unable to protect our widely-dispersed interests. Without a navy, on the other hand, adequate in size and power, the mere possession of such bases and ports would be almost valueless. Their usefulness would extend no farther than the range of their armament, and they would almost inevitably fall to the country whose fleet commanded the seas. Sea power depends on a proper combination of both naval strength and naval bases.

Strength

So unique is Britain's absolute dependence on sea communications that, up to 1914, the maintenance of naval supremacy was regarded as essential to the safety of the Empire, and a strength roughly equal to that of the combined strengths of the next two greatest naval powers was maintained. After the war, however, the impossibility, for financial reasons, of competing with the United States, which was determined "to create a navy equal to the most powerful maintained by any other nation in the world," led to our relinquishing this Two-Power standard and admitting the right of that country to naval equality with the British Empire. The Washington Conference of 1921-1922 and the London Naval Conference of 1930 saw in successive stages, the application of the principle, of equality between Britain and the United States. This was re-affirmed in notes exchanged during the London Naval Conference of 1936. In other respects quantitative limitations have now been removed by the termination of the Washington and London (1930) Treaties, and the situation can therefore only be described in general terms :

- (a) The British Empire (including the Dominions) has agreed not to exceed naval equality¹ with the United States in all important categories of fighting ships, though slight modifications, within defined limits, may be made by either Power to meet special needs.
- (b) Relative to the three naval Powers, Japan, France

¹ The present British Naval Defence programme, though on a larger scale than the American, has not, for political reasons, been objected to by the U S A

and Italy, the British Empire still has a Two-Power standard in capital ships cruisers and aircraft carriers, a considerable superiority, but not a Two-Power standard in destroyers, but only equality in submarines with Japan and less than equality with France.

- (c) Relative to Germany the British Empire has, by the Anglo-German naval agreement of 1935, the right to a superiority of 100 : 35 in total tonnage and of 100 : 45 in submarine tonnage.

Distribution

The distribution of the British Navy—apart from the Dominion naval forces—naturally has varied from time to time in accordance with the political outlook. Thus, for many years when we had no serious naval competitor our Covering Force was divided between the Home Waters, the Atlantic and the Mediterranean. From 1908 onward to the conclusion of the war it was massed in the home waters to meet the German menace. To-day, as again no immediate menace exists, it is divided into two large concentrations, the Home Fleet based on the Home ports and the Mediterranean Fleet based on Malta, with Gibraltar standing as an intermediate link. It is therefore distributed now round the heart of the Empire and along its central artery, avoiding as far as possible the danger of dispersion, but sufficiently extended eastwards and southwards to meet any likely contingency which might arise, with the minimum of delay.

Obviously, if it is to fulfil its onerous functions it must contain ships of every category necessary to defeat or neutralise the main body of the enemy's force. It alone normally contains battleships and battle cruisers. Its strength must be relative to the strength and composition of the navies of the other great naval Powers.

The Protective Squadrons whose functions are (1) to carry out the normal peace-time duties of showing the flag, policing our lines of communication, dealing with piracy as in the China Seas and preventing arms and slave traffic as in the Persian Gulf, and (2) To provide in war direct protection, to our ships on the different routes, against raiding cruisers, submarines and aircraft, and carrying out convoy duties, are at present distributed in four naval stations abroad and based on ports situated at or near important focal areas. The

stations (which are marked on map 6) are the China Station (base Hong-Kong); the East Indies Station (base Singapore); the Africa Station (base Simonstown); the America and West Indies Station (base Bermuda). To these may be added also the local protective Squadrons maintained by Dominions, viz., the Royal Australian Navy (base Sydney); the Royal Canadian Navy (bases Halifax and Esquimalt); the New Zealand Squadron (base Auckland).

The strength of each of the four British protective squadrons is based on a variety of factors—the magnitude of its probable responsibilities, the length of the sea routes and normal amount of shipping for which it is responsible, the distances over which it may be required to perform convoy duties and the proximity or otherwise of the naval and air bases of a great Power. These factors are capable of calculation with a fair degree of accuracy, and therefore the strength of each Protective Squadron is fixed not by the strength of other powers but by the definite responsibilities which it must bear. The strength therefore of the Covering Force is relative to the naval force or forces of other Powers; the strength of each Protective Squadron is absolute, determined mainly by calculable geographical and economic factors.

The numerical distribution (December 1936) of our capital ships, cruisers and aircraft carriers, omitting that of the Dominion Forces which was given on page 27 is as follows:

	<i>Capital Ships</i>	<i>Cruisers</i>	<i>Aircraft Carriers</i>
Home Fleet	6	3	2
Mediterranean Fleet	5	7	1
China Station (Hong-Kong) ..		8	1
East Indies Station (Singapore) ...		3	
Africa Station (Simonstown) ..		2	
America and West Indies Station (Bermuda)		5	
In Reserve at Home	4	20	3

NAVAL BASES AND DEFENDED PORTS

Definitions

A naval base has been defined as a "defended harbour from which a fully equipped fleet can strike."¹ This definition describes many of its characteristics with an economy of words. Defences, docks, workshops, stores, equipment, fuel, and a position from which operations can be conducted against

¹ "Naval Bases in relation to Empire Defence." Admiral Brownrigg. *R U S I Journal*, February, 1932.

the enemy are all implied in it. In short, maintenance and operations are its chief functions. The definition, however, is not completely adequate, for bases have an important defensive rôle also. They are havens where naval and merchant ships can take shelter, where transports and supply vessels can gather in safety before they are convoyed to their next destination, barracks from which the Navy can police and protect our communications as well as harass those of the enemy. Defended ports, such as Aden, Colombo, and Albany, have almost all these attributes, but lack the facilities for docking and repairs which a base provides, and can be regarded as potential bases which would require further equipment to make them complete.

It is clear from the characteristics of a base that its preparation will normally take time. Docks, permanent defences and equipment have to be made available. *Requirements of a naval base* Hasty improvisation, though sometimes necessary for operational purposes, as was the case with Scapa Flow in 1914 and the Island of Mudros in the Dardanelles campaign, must generally necessitate the sacrifice of some valuable qualities whether in equipment or defence. Further, it is evident that bases are expensive to construct and maintain and that their number is limited by financial considerations. Hence the choice of situations for them, in time of peace, must be determined carefully with due consideration of all the factors involved, particularly those relating to position, resources and security.

Geographical situation is obviously a decisive factor. Bases *(1) Position* must be chosen with an eye to possible contingencies; they must be related to the work which the fleet may be called on to perform and their positions are therefore not haphazard. They will generally be placed at or near the important focal areas, such as maritime defiles, junctions of trade routes or terminal areas, on the lines of sea communication.

Also, it is desirable that they should not be too far from their support bases or from other defended ports. The links in the chain must not be too long—not longer certainly than the fuel capacity of the average ship, and, if possible, the lines of communication from one overseas base to another or to the home ports should not be too closely flanked by other great naval powers. A good climate, also, is desirable for the

personnel of the ships, dockyards, workshops, etc., and there should be a sheltered harbour.

- (ii) *Resources* Dockyards, workshops, oil tanks, good anchorage, ample cable and wireless communications are all necessary. Important resources, such as coal, oil, industries and manufacturing establishments, within easy reach will be advantageous, because they will release the Navy from the task of safeguarding the passage by sea of the necessities for itself and the base and, hence, will allow it to fulfil better its primary functions.

It is obvious that a distinction must be made, as regards resources, between bases designed for the Fleet or Covering Force and those designed only for cruisers and smaller vessels. For the former, large docks capable of taking capital ships of 35,000 tons, machinery for repairing them, cranes for removing and replacing large guns, etc., are necessary, and are to be found outside the Home Bases only at Malta and Singapore.¹ None of our other overseas bases are designed to deal normally with vessels larger than 10,000 ton cruisers.

- (iii) *Security* Security against attack by sea, by land and by air, or by internal disturbance and sabotage must all be considered. For this purpose all three arms, the Navy, Army and Air Force, will be required in the proportions which are demanded after due consideration of the problems involved. The first line of defence, the Navy, must not be hampered by the necessity for affording direct local protection to its own bases. "Our seaports must rely on local means of defence, leaving your Majesty's Navy free to act at sea and attack his (the enemy's) interests there." This local protection must be provided by the Army and Air Force which, in this sense, "keep goal for the Navy." But geographical considerations also play an important part. Security against attack by sea may be assisted by choosing a site where there will be difficult access for enemy ships, such as a harbour with a narrow entrance or one screened by islands or shoals, and with waters unsuitable for enemy mining or submarine operations. Security against attack by land can be ensured by the absence of a vulnerable land frontier. Every Imperial base outside Great Britain and the Dominions

¹ Gibraltar is to be improved, to bring it up to this standard

fulfils this requirement, for all are situated either on islands or small peninsulas. Security against attack by air implies ample space for aerodromes and for ground anti-aircraft defences, consisting of searchlights and anti-aircraft guns disposed in depth. To obtain this depth in the case of harbours, such as Valletta, which are exposed and not at the end of a long estuary is obviously very difficult. Internal security can be best ensured where there is a population loyal and united and not susceptible to dissensions caused by political, racial or religious differences.

It is true that no overseas base in the Empire possesses all these desirable characteristics. Thus, Gibraltar is hampered by lack of size and accommodation, particularly for air units; Malta by the distance and vulnerability of the routes over which its essential supplies have to be conveyed, as by its susceptibility to air attack; Singapore by climate and its mixture of races; Sydney by its remoteness from the great sea routes; Hong-Kong by climate, and by its proximity to the main bases of Japan. In fact, none is perfect, but in each all the considerations must be taken into account.

It has been already pointed out that the defence of a naval base is a combined responsibility of the Navy, Army and Air Force; the Navy being responsible for maintaining the lines of communication to sources of supply and reinforcement and preventing any protracted attack by large naval, military and air forces; the Army for dealing with internal trouble, protecting the base against raids or capture, in the case of a temporary loss of our sea supremacy in the region, and the Air Force for co-operating with both Navy and Army by reconnaissance, artillery ranging and air attack on enemy ships and aircraft. The strength and composition of the defence force and its armaments will naturally be based on the probable scale of attack and the period for which it may be necessary that the base should hold out without naval assistance, and on the responsibility for maintaining internal security in a population composed perhaps of many elements and liable to panic. At the same time it must not be so great as to lock up in fixed defences a larger force than is absolutely necessary. Large forces in fixed defences could never compensate for an inadequate Navy or Air Force.

*The Scale of
Defence of
Naval Bases*

Up to and during the war our very large margin of naval strength compared with other Powers reduced the likelihood of an attack on any of our overseas bases or defended ports to a raid made at most by a few cruisers, and the scale of defence could be calculated on that assumption. To-day, however, when our navy has been almost halved by post-war Treaty arrangements and when new weapons have been developed, it is possible that some of our overseas bases such as Malta, Singapore or Hong-Kong might have to sustain much more varied, dangerous and protracted attacks before the issue could be decided by naval action. The modernization of our naval bases and some alterations in the composition of their defending forces have therefore become inevitable. In some quarters a suggestion is put forward that the heavy fixed armament should be replaced by aircraft, mobile and therefore able to be moved to the area where most required, entailing less capital expenditure and affording greater range of action than any gun. The objections to this course are that fixed armaments have the great virtue of being "fixed" and are not easily moved in periods of economy or panic, whereas the very mobility of aircraft would render them liable to this fate; and, further, that the effect of air attack on properly defended armoured vessels moving at great speed is still a matter for conjecture while there is no doubt about the efficiency of land guns. The modernization of our bases is therefore more likely to take the conservative line of a carefully calculated proportion of the various arms based on the geographical and strategic circumstances of each particular case.

CHAPTER VIII

THE MEDITERRANEAN AND INDIAN OCEAN

THE geography of the Mediterranean Sea makes it peculiarly suitable as an area for naval and air attack against ships moving along it. There are three bottlenecks, the Straits of Gibraltar, the narrows between Sicily and Cape Bon, (100 miles), and the entrance to the Suez Canal, where shipping converges. A variety of routes or dispersion over a wide area is impossible. The depth of the sea is so great that the use of minefield barrages on a large scale is impossible, and its comparative smoothness and good weather are helpful to the submarine and to aircraft. The main British line of communication is particularly susceptible to attack. From Gibraltar to Malta is almost 1,000 miles ; from Malta to Port Said almost another 1,000, and the route is flanked by French naval and air bases at Toulon, Oran, Algiers, Bona and Bizerta, and Italian bases at Spezia, La Maddalena, Cagliari Messina, Taranto, Tobruk (air base in Libya), and Leros (in the Dodecanese Islands).

The last war, indeed, provided an excellent object lesson of the value of submarine attack in this sea. Great losses were sustained by us there, chiefly in the area between Sicily and Tunis, and for a time, before the introduction of the Convoy System, the Mediterranean had to be declared closed by the Admiralty to all British ships except those required for military and naval purposes. Yet it must be remembered that the losses incurred were the work of not more than five or six U boats operating at any one time from comparatively remote bases at Pola, Fiume, Cattaro or Constantinople. A situation in which ten or twenty times this number might be operating against our narrow lines from bases on the coasts of Africa, France or Italy is unpleasant to contemplate.

Further, our naval bases at Gibraltar and Malta are within range of the territory and bases of two of the greatest air

powers in the world ; and there is no part of our sea route from Gibraltar to Malta which is too remote from French or Italian territory to be attacked by aircraft ; and most of our route through the Eastern Mediterranean is within air range of Italian bases.

It is clear, therefore, that in a war with one or other of these Powers, the protection of our two bases from air attack and of our shipping on the sea routes from air and submarine attack would be a serious problem. The first entails a modernization of the scale of defence of the bases ; the second would require, an efficient convoy system to guard at least the essential military and naval traffic which *must* use the Mediterranean and could not be diverted to the Cape route from both submarine and air attack. Probably, as in the last war, the other traffic would take the safer though longer route round Africa.

The approximate increases in distance and time are given in the following table :—

The importance of the Mediterranean

	From Plymouth.	Via Suez Canal	Time	Via Cape	Time.	Increase in Time.
		Miles.	Days.	Miles.	Days.	Days.
To Bombay		6,200	21	10,500	35	14
„ Sydney ...		11,200	38	12,300	41	3
„ Hong-Kong		9,500	32	12,800	43	11
„ Singapore		8,100	27	11,400	38	11

It will be seen that the effect would be considerable in the case of India and small in the case of Australia. The actual difference in time is, however, not a proper measure of the inconvenience ; the serious problem would be the need for more ships, fuel, food, etc., to perform the same work. In ships alone the effect would be, in the case of India, that nine ships would be required for every five required by the Mediterranean route ; for Australia eight ships for every seven, and for Hong-Kong and Singapore four ships for every three. This takes no account of the increased cost of maintenance and supplies entailed by the longer voyage.

The increased shipping required would be a matter of great importance in view of the less favourable position which Great Britain holds as regards tonnage compared with 1914. On the other hand, however, only about 20 per cent. of our total imports come through the Mediterranean Sea. Of these, 11 per cent. come from countries within that sea, and of the remainder most of the commodities, such as oil, tin and rubber,

could be obtained from the New World and would, in any case, be so obtained as an economy in ships could be effected. Australian traffic would continue to use mainly the Cape route which is less susceptible to the dangers of submarine and air attack. The closing of the Mediterranean to merchant traffic would not, therefore, seriously affect the supply of foodstuffs and raw materials to Great Britain, except by reducing the available tonnage of ships.

THE INTERESTS OF THE OTHER MEDITERRANEAN POWERS

In considering the security of the Mediterranean as an Imperial sea route, it is necessary to bear in mind the positions, relative strengths and commitments of the two great naval and air Powers, France and Italy, which have territories on both sides of it. For France it is the only means of communication to Algeria and Tunis, and is the most important route to French Morocco, Madagascar, French Somaliland and French Indo-China. For Italy, it is the route to Libya, Eritrea, Abyssinia and Italian Somaliland. It is therefore no less essential to these Powers, from the standpoint of colonial defence, than it is to ourselves.

A great submarine and naval and air Power whose home *France* territory touches the Mediterranean, France has a population almost stationary in numbers, in spite of the acquisition of Alsace and Lorraine, and an eastern frontier in Europe 100 miles longer than before the war. Further, her industries require a secure supply of raw materials. For this supply of raw materials she looks partly to her colonies in Africa, and particularly to French Equatorial Africa which, as yet, is practically undeveloped, but has great possibilities. Tunis, Algeria and French Morocco have small but highly fertile regions, and a number of mineral resources.

France also looks to her African colonies for the additional man-power, which she may require in case of war. In Algeria and Tunis compulsory military service has been in operation in principle for some years; Senegalese regiments have been part of the French Colonial Army since 1911; and, while the peace establishment of coloured African troops is less than 200,000, it is expected that one million could be enrolled, out of the total population of 26 millions, on mobilization.

The importance of the Mediterranean to France

Algeria and Tunis are, therefore, a collecting area, for man-power in case of war and of material resources generally, for the West African group of French colonies. The opening of motor routes across the Sahara, and the scheme, frequently mooted, for a trans-Saharan railway which would bring Mediterranean ports, such as Oran and Algiers, into rail communication with French Equatorial Africa and with French ports on the Atlantic like Dakar, are natural corollaries. By means of this latter scheme material and personnel could be moved to the Mediterranean over a line unthreatened by any other Power.

The necessity arises, however, for maintaining the security of the line of communication from French North Africa to France; for, without this security, the collection of resources and personnel would be valueless. The average distance across the Mediterranean, between ports such as Algiers and Toulon, is only about 450–500 miles; and the security of this short line of communication is one of the chief responsibilities of the French Navy. The method, which is adopted for its defence, is the employment of fast cruisers, aircraft and submarines, not merely to ensure directly the safe movement of grain and troop carriers, but also to make an enemy concentrate his attention on the protection of his own shipping passing along the Mediterranean. Hence, to the French, the submarine appears to be an essential weapon of defence, and they have consistently refused to agree to its abolition, as at the Washington Conference in 1921–1922 and the London Conferences in 1930 and 1936. Further, as the French routes to Africa are flanked by Italy, France has always insisted on naval equality with Italy in the Mediterranean, and on a force outside that sea to guard the Atlantic coastline and sea routes, *i.e.*, superiority to Italy. The French naval and air bases are at Toulon, St. Raphael, Oran, Algiers and Bizerta.

Italy

Italy is completely a Mediterranean Power, with no access, except through its waters, to the other seas of the world. She has increased greatly in strategic and economic strength since the war. The Treaty of St. Germain removed one serious flaw in her northern frontier, from the standpoint of defence, by giving her the Trentino salient and control

over the Brenner Pass. On her eastern side, she obtained the peninsula of Istria, half the harbour of Fiume and the old Austrian naval bases at Pola and Trieste. The Austro-Hungarian Empire with a population of 56 million people was broken up; the Austrian fleet in the Adriatic ceased to exist; and Italy's neighbours on the north-east and east are now the small republic of Austria, and the new and incompletely consolidated state of Jugo-Slavia. Her land problem on the northern frontier has disappeared, and the Adriatic, from a naval point of view, has become practically an Italian lake. Under the Fascist regime, industry, agriculture and shipping have increased, and a new Imperial spirit has been fostered. Italy, has, however, a serious population problem though of an opposite character to that of France. Her population rose between 1911 and 1921, in spite of war losses, from $34\frac{1}{2}$ millions to $38\frac{3}{4}$ millions; and to-day it is over 43 millions. As her area available for agriculture is limited, her dependence on external supplies of foodstuffs must increase in spite of energetic measures, such as the draining of malarial areas and the application of scientific methods to agriculture.

Prior to 1921 Italy got rid of a large part of her annual increment of population by a flow of emigration to the New World, and chiefly to the United States, but this mode of adjusting her difficulties has been greatly handicapped by a series of American Immigration Laws, restricting the number of immigrants to a fixed Quota each year. Italian colonies do not on the whole offer prospects for the white immigrant. Eritrea and Somaliland are tropical countries unsuitable for white settlement; Libya has only a narrow coastal fringe of fertile land, and the capacity of Abyssinia to take white settlers has undoubtedly been greatly overrated.

A process of industrialization, by which manufactures can be exchanged for raw materials and foodstuffs, helps many of the countries of Western Europe to maintain populations greatly in excess of their own food resources. But such a process depends on (a) a secure supply of raw materials, (b) markets for the manufactured products, and (c) security of the lines of communication to the raw materials and the markets. Italy is, on the whole, unfavourably situated with regard to the raw materials for industry. She has no

considerable mineral resources except mercury, lead, sulphur and zinc, and is dependent on imported coal to the extent of ten or twelve million tons a year. The Italian colonies are also singularly lacking in minerals, nor are they ever likely to be very profitable markets for manufactured goods. She is, therefore, in spite of strenuous efforts to develop home resources and substitutes, very largely dependent for her raw materials and markets on foreign countries, and, indeed, mainly on countries which lie outside the Mediterranean Sea. Further, in the event of a general mobilization, Italian nationals in America would be called up, and their safe transit to Italy depends on the security of this line of communication.

The security of her seaborne traffic to and from ports outside the Mediterranean, to her sources of raw materials and to colonial possessions in the Red Sea is therefore a matter of vital importance to her. Her line of communication through the Western Mediterranean is flanked on both sides by French naval and air bases, and she has for these reasons consistently demanded since the war naval equality with France. That through the Eastern Mediterranean and Red Sea is flanked by territories under British military control. She possesses on the other hand two valuable assets. She flanks the gateway, one hundred miles wide, from the Western to the Eastern Mediterranean ; and also the narrow entrance to the Red Sea from the Indian Ocean, and, by the exercise of sea and air power, might perhaps make communications for France or Great Britain to their territories in the East extremely hazardous and even render Malta insecure as a naval base.

The Italian naval and air bases are at Spezia, Taranto, Brindisi, Maddalena, Cagliari, and Leros (Rhodes).

Spain, which flanks, on both sides, the Straits of Gibraltar, occupies a position of great importance relative to the sea communications of the Mediterranean. Her naval bases at Cadiz and Cartagena flank closely the focal areas at the Atlantic and Mediterranean ends of the Straits : Mahon, the defended port in the Balearic Islands, is close to the routes from Gibraltar to Toulon and Marseilles and not remote from that which runs to Malta ; Ceuta, a defended harbour in Spanish Morocco, faces Gibraltar only 14 miles away ; gunfire from

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there or from the high ground behind Algeciras might make the Admiralty harbour at Gibraltar untenable ; while, in the Atlantic, the main Spanish base and dockyard at Ferrol (which flanks our route from the Home ports to the Mediterranean), and the Canary Islands, which lie at the junction of trade routes in the central Atlantic, are obviously positions of great potential importance. Further, she has considerable mineral resources, particularly of iron, copper, lead, zinc, sulphur, mercury and coal, and, with a population of only 23 millions, or 117 to the square mile, is self-supporting in food supplies. Though reckoned to-day a small naval and air power she has, indeed, much to offer as an ally to Great Britain, France or Italy. The result of the present civil war and her future attitude towards Great Britain must therefore be a matter of great importance.

Jugo-Slavia, though only a small power, with a navy of negligible size, flanks the Adriatic and possesses near the entrance, on the Straits of Otranto, a naval base at Cattaro, which could be used for submarine operations in both the Adriatic and Mediterranean. As an ally of France and member of the Little Entente, she could provide naval and air bases for that country in a war in which the Mediterranean powers were involved. To the south of Jugo-Slavia, however, is Albania which has an alliance with Italy which permits that country to use the harbours of Valona and Durazzo as naval bases and to exploit the oil resources.

The Greek and Turkish naval forces are of small account, but both countries occupy positions of such importance relative to the Eastern Mediterranean that they would almost certainly be involved directly or indirectly in any operations in that region. The Greek harbour of Corfu off the entrance to the Adriatic and facing the Italian naval base at Taranto, is spacious and has a deep-water entrance. Salamis, Mudros and Salonika are important relative to the Aegean Sea. Turkey which lies astride of the Dardanelles, Sea of Marmora and Bosphorus has been permitted by the Montreux Convention (1936) to fortify and control for 20 years the entrance to the Black Sea.

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BRITISH BASES AND OTHER TERRITORIES IN THE MEDITERRANEAN

Gibraltar. Area, $1\frac{1}{2}$ square miles. Population, 21,372

Distance from London, 1,313 miles.

Gibraltar

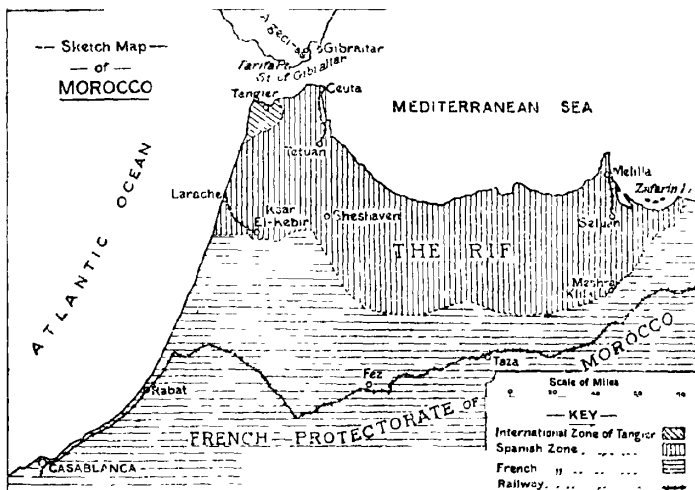
Gibraltar, the first link in the chain of naval bases on the sea route from the Home ports to the East, is a naval base of the Home Fleet and a rendezvous for combined training and operations for the Home and Mediterranean Fleets. Few bases in the world have a situation so obviously important. Only 1,058 miles from Plymouth and 991 miles from Malta, it is within easy reach of both, and the route to the former, though flanked by France, is an open one, allowing of great variety. It lies near the entrance to one of the most important maritime defiles in the world, and, hence, enables the British fleet to patrol that entrance and deny exit or ingress to surface vessels, without being immediately dependent on the Home bases for docking, repairs, equipment and supplies. It, therefore, enables us to separate the French fleet in the Mediterranean from that in the Atlantic and to prevent access to or from the Atlantic in the case of other Powers. As a commercial port, its importance in peace may be judged from the seven million tons of shipping which annually puts into it; in war, it is the shelter and convoy port nearest home on the most important of our Imperial communications to and from the East.

As regards resources, it possesses an Admiralty harbour of 440 acres, and the necessary docks, equipment, fuel and supply facilities for the fleet, but it is devoid of natural resources and all requirements must be imported. A water supply is assured, however, by the well-known catchment area on the side of the rock. It is the first cable station outside Britain on the all-red cables from Great Britain, *via* the Mediterranean, to the East and has an important wireless station also. Its small area, however, prevents the possibility of any further harbour development, except by building expensive works on the east side of the rock, and also limits seriously its use by all aircraft except flying boats and seaplanes.

The garrison consists of 2 battalions (including 1 short tour

battalion) and 1 Heavy Brigade R.A., 1 A.A. Section and 2 Fortress Coys. R.E. No air unit is stationed there, except such as may be on fleet vessels from time to time. Its security against attack by land is perhaps not so great as it once was, as the Admiralty harbour might be commanded by fire from Spanish ground on the heights behind Algeciras; but this danger could only arise in the unlikely event of Spain being hostile to us or occupied in that region by some hostile power. Air attack, based on French or Spanish territory in Africa, is also a contingency which might arise, and the lack of accommodation for anti-aircraft defences in depth at the base would in that case be a handicap to the defending force. The French naval and air base of Oran is only 235 miles away. On the other hand the nearest Italian territory (the south-west corner of Sardinia) is over 750 miles distant, and Gibraltar may therefore be regarded at present as outside the range of serious and frequent air attack in the case of a war with Italy, unless that country had an ally further west.

Near the Atlantic entrance to the Straits of Gibraltar, on the African coast, is the town of Tangier which is the port for a considerable and growing trade from the interior of Morocco. Its possible development is not restricted as in the case of



MAP 7—Gibraltar and Tangier, showing the Zones in Morocco.

Gibraltar by lack of space, and it has a wealthy and comparatively unexploited hinterland. Further, its geographical situation, almost at the junction of the Mediterranean and the Atlantic, *suggests a natural suitability as a port of call and fuelling depot.* In each of these respects it possesses advantages lacking in the case of Gibraltar and its expansion might seriously lessen the value of the latter from both a commercial and a strategic point of view. The control of Tangier, therefore, has an intimate bearing on the security and prosperity of Gibraltar.

By agreements made in 1906 and 1912 Morocco was divided into three political zones :—

- (a) A Southern or French Zone, which was placed under French influence.
- (b) A Northern or Spanish Zone, which was placed under Spanish influence.
- (c) The town of Tangier itself, with about 225 sq. miles of country, which was placed under International control.

In December 1923 the question of the control of the whole Tangier Zone was re-opened, and a Convention of representatives of Great Britain, France and Spain was held in Paris, at which a new agreement was reached. The chief results of this agreement were as follows :—

- (1) The Zone was placed under a régime of permanent neutrality. No military establishments, land, naval or aeronautical, no base of operations, no installation which could be used for warlike purposes might be created or maintained in the Zone. The Administration were, however, permitted to take all measures of local defence against incursions of hostile tribes, other than a concentration of air forces.
- (2) Supply columns and troops proceeding to or coming from the French or Spanish Zones might, after previous notification to the Administrator of the Tangier Zone, use the port of Tangier, and its means of communication to the respective Zones, for not more than 48 hours at any time.
- (3) The zone is self-governing, legislative power being vested in an International Legislative Assembly, over which a Committee of Control composed of the French, Spanish,

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British, Italian, American, Belgian, Dutch and Portuguese consuls, can exercise a veto.

This Tangier Statute was due for revision in 1936, but since none of the Powers concerned demanded that it should be revised, it may be regarded as automatically renewed until 1948.

For the immediate future, at least, French influence predominates in the Tangier Zone, and this, with British co-operation, is a safeguard against its being used for military purposes. In any case it suffers from a serious lack of harbour accommodation. There is little more than an open roadstead and the remains of a mole built during a period of British occupation two and a half centuries ago. Any development in this direction would call for a very large expenditure of money before the port could be made thoroughly suitable for modern conditions.

The restricted space which limits the further development of Gibraltar as a naval and air base has given rise to a suggestion, that, by arrangement with Spain, Gibraltar should be exchanged for Ceuta. The arguments advanced in favour of this are :—

- (1) That the position of Ceuta is equally good as regards naval control of the entrance to the Mediterranean, while there is ample room for expansion both from a naval and an air point of view.
- (2) That Spanish sentiment would regard such a change with great favour.
- (3) That the development of Morocco would gradually bring an increasing measure of local trade to Ceuta.

The arguments against the exchange are, however, even more weighty. Ceuta would have a land frontier to defend, and its possession would entangle us in the troubled affairs of Morocco, particularly with French and Spanish competitors, and would add a new and constant problem of defence. Further, no such exchange could be made unless Spain were willing to give a lump sum to us representative of the capital sunk in the development of Gibraltar during our period of occupation, in order that Ceuta might be made of equal value without expense to Great Britain. And lastly, British sentiment is even more strongly concerned in the matter than is

*Ceuta
A possible
alternative to
Gibraltar*

Spanish sentiment. The Rock has become, in a sense, the symbol of the British Empire, and such an exchange could only be accomplished in the face of the strongest British feeling, if an unanswerable case could be produced in favour of it.

alta

Total Area of Maltese Group 122 square miles. Population

241,621

Distance from Gibraltar	991 miles
„ „ Port Said	936 „
„ „ Marseilles	660 „
„ „ Sicily	52 „

Malta, the largest of the island group which also includes Gozo and Comino, is the base of the Mediterranean Fleet. It is almost midway between Gibraltar and Port Said, approximately equidistant from Messina (180 miles) and Cape Bon (220 miles) and is at the gateway from the western to the eastern Mediterranean. No other island is so centrally placed relative to the Mediterranean Sea, except the small rock-bound Italian island, Pantellaria,¹ on which, it is stated, Italy is establishing a base. By virtue of this centrality Malta enables our fleet to reach any part of the Mediterranean in not more than three days; by its situation in the narrow waters between Sicily and Africa it enables our warships to deny passage to hostile surface craft.

The almost land-bound harbour of Valletta is one of the best harbours in the world, and is equipped with permanent docks, a large ex-German floating dock, oil tanks, etc. Apart from its purely naval importance, it lies at a focal area of sea trade and is a port of call for some 3 or 4 million tons of shipping annually. In spite of its small area, its stony soil and great density of population (about 2,000 to the square mile), the indefatigable labours of its inhabitants have made it an exporter of vegetables; but the main staples of life, all manufactures, equipment, machinery, oil, etc., must be imported. It is a station on the "all-red" cables through the Mediterranean and has a wireless installation of some importance also.

The defence of Malta involves three problems (1) the security of its communications by sea on which depend its supplies, (2) its defence against air attack, (3) the maintenance of

¹ The small adjacent islands of Lampedusa and Linosa are also, it is understood, being fortified by Italy.

internal security. These problems are not separate and distinct but interdependent. Thus, the defence of the sea routes depends on the possession of the base and its usefulness, and this in turn depends on its security from constant air attack and civil disturbances.

With regard to the second problem, the naval base at Malta is only 55 miles from the nearest point in Sicily, or 20 minutes by air, and only 200 miles from Libya. The harbour has a narrow entrance, and vessels might find difficulty in getting to open sea even if due warning could be given. Land anti-aircraft defence composed of searchlights and anti-aircraft guns in depth is geographically impossible. Hence the problem is one which must be met by the closest co-operation between naval and land anti-aircraft defences in conjunction with our own aircraft based on Malta and on the ships of the Fleet.

Its military garrison consists of 1 Heavy Brigade R.A., a Anti-Aircraft Brigade, 2 Fortress Coys. R.E. and 2 battalions as well as local forces, viz., the Royal Malta Artillery (3 Heavy Batteries), a regular Corps of the British Army not liable for service outside the colony, and the King's Own Malta Regiment, a cadre which can be built up from reserves and is liable to service outside Malta. The air garrison comprises 1 Flying Boat Squadron (base Califrana) and 3 Squadrons of the Fleet Air Arm. There is a large aerodrome at Hal Far.

By an Act of 1921, self-government was granted to the colony, and all local affairs were handed over to a responsible government, consisting of a cabinet executive and two Legislative Houses. But all questions relating to Imperial defence, Imperial interests, foreign policy and external trade were "Reserved matters" dealt with by the Governor and a small nominated council of British officials. It was within the power of the Governor to suspend this constitution and rule autocratically.

During the last few years, circumstances necessitated such a suspension on two occasions. On the first, alleged clerical interference in elections; on the second, the refusal of the British Government to allow Italian to be a compulsory language in the elementary schools, and its decision to substitute Maltese (the language of ninety per cent. of the people)

for Italian in the Law Courts were the causes. On both, the conflict was mainly between the British authorities and that part of the professional classes which was educated in Italy. This Italian speaking section numbers at most one-sixth of the total population, but is important because of its social and political status, the support which it obtains in the Italian press, and its attachment in some cases to the Italian claim for the ownership of Malta, a claim based on the spurious grounds that its inhabitants are of Italian race and culture. As a result of this conflict the semi-Dominion status of Malta was replaced in 1936 by a colonial form of government, consisting of the Governor and an Executive Council composed mainly of officials. English and Maltese are henceforward to be the only official languages. The new constitution, it has been stated, is an interim one and its duration will depend on the degree of co-operation displayed.

Cyprus, 240 miles from Port Said.

Area, 3,584 square miles. Population, 347,932

ypus

The island of Cyprus, which lies off the main track of our sea communications, is unfortified and is garrisoned only by native police, together with one company of British troops detached from a battalion serving in the Sudan.

We obtained it in 1878 from Turkey on an agreement to defend the Asiatic dominions of the Sultan against aggression by Russia, and undertook at the same time, to pay to the Porte, year by year, the surplus revenue of the island during our occupation. This caused a continual drain on the available resources of the island for some years, and retarded all possibility of progress. In 1914, however, when Turkey entered the war, Great Britain declared it to be a Protectorate, an act which was later confirmed by the Treaty of Lausanne. In 1925 it was given the status of a colony.

It consists of a central plain, lying between a narrow mountain ridge on the north and a broad and varied highland at the south, which rises to 6,000 feet. The capital, Nicosia, is in the centre of the plain, and is connected by rail with Famagusta, the only important port in the island which has been considerably developed during the last few years. The other coast towns, such as Limasol and Larnaca, have harbours

which are only open roadsteads. Larnaca is connected with Alexandria by cable.

The economic importance of the island, though still small, is increasing. The construction of the pipe lines from the Iraq oilfields to Tripoli and Haifa may have a beneficial effect on its trade, for it now lies across important sea routes instead of being, as before, remote from them. The completion of railway communications from the Mediterranean to Iraq and the East, either by a line from Haifa to Baghdad or by closing the gap in the so-called Constantinople-Baghdad railway between Nisibin and Kirkuk, would also probably benefit it.

Strategically, though it possesses no harbour capable at present of being used as a naval base except by small surface vessels and submarines, the vulnerability of Malta to air attack may render it desirable to construct a subsidiary naval and air base at Famagusta. This port is practically out of air range from Italian bases except from Leros (420 miles), or from Tobruk in Libya (350 miles), but would require a large expenditure to make it suitable.

The population includes 275,000 people of Greek extraction and some 65,000 Mohammedans. Due representation of each of these important sections was given in the composition of the Legislative Council formed in 1925. Thus, the Greeks were given twelve representatives and the Moslem section three ; but in order to prevent the Greek party from carrying legislation inimical either to the minorities or to Imperial interests nine official members were also given seats on the Council. A large section of the Greek party, dissatisfied with the arrangement and aiming at union with Greece, carried on propaganda for the cession of the island to Greece and, in October 1931, serious riots broke out, led by local ecclesiastical politicians. These disturbances necessitated the despatch of three British cruisers from Crete and of military and air detachments from Egypt ; and, as a result of the trouble, the constitution of 1925 was suspended. It should be added that no official countenance was given by the Greek government to the idea of a union of Cyprus with Greece.

THE EASTERN ENTRANCE TO THE MEDITERRANEAN

The eastern entrance to the Mediterranean Sea lies in an area in which British influence is at present predominant. Egypt, through which the Suez Canal runs, has now a perpetual defensive alliance with Great Britain; British troops are permitted to garrison Alexandria until 1944, and British forces can occupy areas on the banks of the Canal until such time as Egypt is capable of defending itself. Palestine, a buffer against land attack from the north on the canal is a British mandate,¹ and its port of Haifa has become a great oil outlet for the Iraq oilfields. In subsequent chapters these points will be considered in detail. But it is necessary here, in considering sea routes, to point out that new problems have arisen, owing to the danger of our communications through the Mediterranean being interrupted at the centre. Hence the route by the Red Sea to the Eastern Mediterranean has come into greater prominence.

In the Red Sea, recent events—the Italian conquest of Abyssinia, the establishment there in Eritrea of large military and air garrisons and the development of Massawa into an important base—are of great importance. The British sea route is now closely flanked, particularly near the narrow entrance from the Indian Ocean by a strong foreign air force which in combination with submarines might, in time of war, hinder the passage of British ships. This new situation has, therefore, increased the strategic importance of Egyptian and Sudanese ports such as Hurghada, Kosseir, Port Sudan and Zeila and Borbera in British Somaliland which might be used as bases or harbours of refuge. The attitude of France which, in French Somaliland, possesses Djibuti, one of the best ports in the Red Sea, would obviously be of prime importance. So also would be the attitude of Saudi Arabia which borders most of the northern shore and whose ruler is on friendly terms with Great Britain. Yemen which adjoins the Aden Colony and Protectorate signed in 1934 a treaty of friendship with Great Britain. The British position in the Red Sea is, therefore, strengthened by favourable political circumstances. But in the final resort it depends on the exercise of sea and air power and hence on the possession of suitable harbours

¹ Proposals for modifying this are now being considered.

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and bases for this. Of these, Aden, which is the only British fortified port between Malta (2,300 miles) and Bombay (1,600 miles) is of great importance as a link in the chain of Imperial harbours and bases along this most important sea route.

It is a fortified fuelling port on a volcanic peninsula, about *Aden* 100 miles east from the entrance to the Red Sea, and about half-way between Port Said and Bombay. The promontory of barren rocks on which it is situated, five miles long and three miles wide, is connected with the mainland by a narrow isthmus of sand which affords exceptional facilities for defence against land attack. The Colony also includes Little Aden, another peninsula to the westward of Aden, together with a small part of the coastline and mainland nearby, including the town of Shaikh Othmán, making the total area of British territory about 75 square miles. By treaties concluded at various times, with the chief tribes an area including the Hadhramaut of about 42,000 square miles was brought under British protection.

The port of Aden contains the only harbour of importance along the whole southern coast of Arabia, and to this fact, as well as to its proximity to the great focal area off the Straits of Bab-el-Mandeb, is due its importance as a port of call, not merely for traffic to India and the far East, but also for the local traffic of Abyssinia, French, British and Italian Somaliland and the Arabian coast. Between four and six million tons of shipping enter it annually.

Its chief defects are due to climate. Almost completely destitute of trees or water, it has a climate with an average range of temperature from 76° to 91° in the shade and with little or no rainfall. A fresh water supply is brought from Shaikh Othmán. Practically all other supplies required have to be imported by sea.

Until 1928, the garrison consisted of coast defence units, one British and one Indian battalion, the Aden troop of Cavalry and one Flight, Royal Air Force ; but, in that year, a reorganization was completed by which, at a saving of £100,000 a year, the defence was entrusted to the Royal Air Force. Accordingly, since then, the garrison has been composed of one Squadron R.A.F.,¹ a section of armoured cars

¹One flight of this squadron is normally stationed in British Somaliland.

and a small body of native levies ; while the fixed armament for coastal defence remains, though on a reduced scale (1 Heavy Battery, 1 A.A. Section, R.A., and 1 Fortress Coy. R.E.)

Its defence problems since the war have been entirely concerned with the land frontiers of the Protectorate. The Imam Yahia of Sana'a, the head of the Zeidi sect, and ruler of the Yemen, laid claim in 1919 to the whole of the south-west part of the Protectorate and, in succeeding years, advanced his forces until, by 1927, he had reached a point only 40 miles from Aden. In addition to this, predatory Subehi tribes, who live in the foothills north-west of Aden, were conducting raids against the settled tribes of the Protectorate. Successful punitive air operations were conducted in both cases and, by 1929, more settled conditions were ensured and the Imam had withdrawn his forces.¹ These operations fully demonstrated the value of the Royal Air Force to deal with an enemy, under the conditions which prevail in Arabia—open ground, limited objectives owing to the villages being built near water supplies, and an enemy unaccustomed to air attack. If more serious operations were to be apprehended, such as combined land and sea operations, then the present garrison would have to be reinforced, as it is obviously not sufficient or intended for such major responsibilities. With the increase of Italian power on the eastern side of the Red Sea, the importance of Aden has been enhanced. It is only 120 miles from the nearest Italian territory.

*Perim,
Socotra*

The island of Perim, which is administered from Aden, lies in the entrance to the Red Sea. We occupied it as a precaution over 60 years ago, and it is now an important fuelling and cable station. Socotra, a British Protectorate, is undefended and is very sparsely inhabited, but has one good natural harbour at Kalenzia.

OTHER ENTRANCES TO THE INDIAN OCEAN

*The Cape
Route*

The Cape Route to the Indian Ocean from Great Britain is less liable to naval or air attack than the route through the narrow waters of the Mediterranean. It can be varied and need not pass close to the ports of any first-class naval

¹ In 1934, a Treaty of friendship was negotiated between the British government and the Imam.

power. It has a fuelling port and defended anchorage at Freetown in Sierra Leone and potential naval harbours, which might be improvised as naval fuelling ports again, as they were in the past, at Ascension and St. Helena. The harbours of Takoradi (Gold Coast), Lagos (Nigeria), and Walvis Bay could also be used for naval purposes. The Azores and Cape Verde Islands, which lie close to the route, are Portuguese, and Portugal has an old and well-established alliance with Great Britain. It passes fairly close to the naval base of Gibraltar and possesses a naval base at Simonstown near Cape Town. On the route to India, in the Indian Ocean, there is a defended port at Durban and a well-developed harbour at Kilindini. Near the route to Australia is the defended harbour of Port Louis, in Mauritius, with a garrison *Port Louis* of 1 Heavy Battery and 1 Fortress Coy. R.E.

Simonstown, near Cape Town, the naval base on this route, *Simonstown* lies in a temperate climate, on a good harbour, remote from the naval bases of any other Power, in a country where industries can be developed and an adequate supply of coal is available, and in a position from which control can most favourably be exercised over the entrance from the Atlantic to the Indian Ocean. It is also centrally situated with respect to the chief embarkation ports of the British Empire. Thus it is about 4,600 miles from Bombay, 6,500 from Halifax (Nova Scotia), 5,800 miles from Melbourne and 6,000 miles from Southampton.

Its defence, together with that of the whole Cape Peninsula, was until 1921 the responsibility of the Imperial Government, and, up to the outbreak of the War, British troops were stationed there. In 1921, however, it was decided that the Union Government should undertake the whole responsibility for the defence of South Africa, including the defence of the naval base. The British Government consequently handed over to the Union the defences, together with a large quantity of war material and stores, and landed and other property. Since 1936, in view of the world situation, the South African Government has been developing this base. A graving dock has been constructed at Durban capable of taking any but the largest type of battle cruiser, and the harbour of Capetown is also being greatly developed.

*The
Australian
Gateway*

The entrance to the Indian Ocean round the south coast of Australia is so remote from the naval bases of any great Power that it is unlikely to be a scene of intense naval activity. It has a naval base at Port Jackson (Sydney), the base of the Royal Australian Navy, and defended harbours at Melbourne, Port Adelaide, Albany and Fremantle.

*The East
Indian
Gateways*

The remaining entrances to the Indian Ocean are through the gateways between the Dutch East Indies and Malaya. The most important of these are the Straits of Malacca, between Sumatra and the Malay Peninsula, and the Straits of Sunda, between Sumatra and Java. Singapore is the dominating harbour of this region. Its magnificent position at the eastern entrance to the Straits of Malacca attracts to it a large entrepôt trade. More than fifty different lines of sea-going steamships use it as a regular port of call. It is the half-way house on the route from China and Japan to India. Further, from a naval point of view it is a central position suitable as a base from which the various entrances from the Pacific to the Indian Ocean could be defended; it is too far from the nearest naval power, Japan, to be attacked by air except by aircraft which are ship-borne; it is within easy reach of the oilfields of Burma and Sarawak and the coal of Labuan; it is the nearest important British port to Hong-Kong, 1,440 miles beyond it, and it is only 1,600 miles from the defended port and junction of trade routes at Colombo.

Singapore

The necessity for a naval base in or near the Indian Ocean, capable of maintaining the largest ships of the British Navy, is obvious. Hong-Kong is at the outskirts of the Empire, and close to the naval bases of a first-class naval power. In the event of a war in the Far East, unless we had a fleet base there, our battleships would have to go 7,000 miles to Malta for repairs. The choice of the situation for such a naval base must be largely governed by the necessity for (a) guarding the entrances to the Indian Ocean from the Pacific, (b) providing a central defended position suitable for the British, Australian and New Zealand squadrons. Sydney, the base of the Australian Navy, though admirably situated from a climatic point of view, and placed in the centre of a white population, fulfilled neither of these necessary qualifications, and the choice lay between Singapore and Trincomali, the excellent natural

lagoon harbour and Royal Naval Yard on the eastern side of Ceylon.

Both these situations are unfortunately handicapped by a climate which is uniformly hot and humid. The establishment of a British naval base in such a climate is therefore a departure for which there is no modern precedent except the bases of the United States near the Panama Canal. The final selection of Singapore was no doubt largely the result of its centrality in respect to Hong-Kong, Port Darwin, Colombo, Calcutta and Madras, its commanding position on the most important entrance from the Far Eastern waters to the Indian Ocean and its close proximity to the other entrances. It has received the support of the governments of New Zealand and Australia, the latter of which is developing Port Darwin as a connecting link between Sydney and Singapore, and has recently constructed large oil tanks there. Large contributions in money towards it have been made by New Zealand, the Malay States and Hong-Kong, and the land for it has been provided free of cost by the government of the Straits Settlements.

The Singapore base lies on the north side of the island of ^{*The*} Singapore facing the neighbouring state of Johore, and on the ^{*Singapore*} eastern side of a causeway joining the island to the mainland. ^{*base*} The air base is close by to the east of the naval base. The peninsula of Johore is wooded and hilly and could be made difficult of access to an enemy. It has no harbours which will take even moderately large ships and rough weather is frequent. The danger of attack on the base, by a landing in that locality, in the face of an adequate fleet and air force based on Singapore is therefore negligible. A chain of defended air bases at Ceylon, the Nicobar Islands and Penang, if constructed, would provide a means for the rapid transfer of squadrons from India and the Middle East. There are, however, a number of problems in connection with the situation. There is, first, the question of internal security, which is complicated by the mixed population of the island. Thus, in 1931 the population consisted of 8,000 Europeans, 7,000 Eurasians and 543,000 Asiatics. The Asiatic section comprises large numbers of Chinese, Japanese and Indians, as well as native Malays. Further, there is the proximity of many islands of the Dutch East Indies, the nearest of which is only a few miles from

Singapore. And lastly, there is the constantly hot and humid climate of the region which makes sustained manual work difficult for the white man. This difficulty may be lessened by the establishment of hill stations in the Malay Peninsula, within easy reach of the garrison of Singapore.¹

OTHER IMPORTANT HARBOURS IN THE INDIAN OCEAN

The great terminal area of sea trade round India has defended fuelling ports at Bombay and Karachi, but even at Bombay, which is the Headquarters of the Royal Indian Navy, there is no dock accommodation or equipment suitable for the larger categories of fighting ships.

*Colombo and
Trincomali*

Colombo, which is a junction of trade routes to India, Africa, Australia and the Far East, is the centre of a great focal area, and a greater tonnage of shipping enters its harbour annually than enters all the ports of British India combined. Some sixteen hundred miles from Aden and the same distance from Singapore, it and the Royal Naval depot and fuel reserve at Trincomali on the eastern coast of Ceylon, are important links in the chain of defended ports.

*Other Posses-
sions of
Importance
in the Indian
Ocean*

Other possessions of importance, in the defence of lines of communication in the Indian Ocean, are the defended fuelling and cable station of Pt. Louis (Mauritius), whose importance would be greatly magnified if the Suez Canal route were closed, as it lies near the sea routes from the Cape to Colombo and Australia: the defended fuelling and cable station of Durban which possesses ample supplies of good coal from the Natal mines; and the harbour of Kilindini in Kenya Colony, situated on an island connected by a bridge 1,000 ft. long with the mainland. Kilindini has been described as the best harbour on the east coast of Africa, and will become of greater importance with the development of our possessions in East Africa. At a Governor's Conference in 1936 it was decided to turn this into a defended port, and steps have already been taken to do so. Dar es Salaam is a good harbour, but being in a Class B mandate cannot be fortified. Zanzibar, the Seychelles Islands and the Keeling or Cocos Islands (under the control of the Straits Settlements) are important as cable

*Port Louis,
Durban,
Kilindini,
etc*

¹ See page 169.

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stations, and may be useful as air ports on a flying boat route to Australia.

The fine natural harbour of *Delagoa Bay*, though not *Delagoa Bay* British owned, is one of the most important in South Africa. From Lorenzo Marques a railway runs, by way of Pretoria, to Johannesburg (400 miles), but the nearest point in the Transvaal is only 50 miles away. Further, *Delagoa Bay* lies at the mouth of the Mozambique Channel, through which our ships pass on journeys between the Cape and our possessions on the east coast. The political status of this bay is therefore of some importance.

Under a treaty made in 1823 with the native chiefs, half of *Delagoa Bay* was granted to England, but Portugal claimed the whole of it, and the dispute was finally submitted to the arbitration of the President of the French Republic. He gave his award against Great Britain, but, by another agreement, the Portuguese Government bound themselves "not to cede or sell to any third power the territory known as *Delagoa Bay*, without giving Her Britannic Majesty's Government the opportunity of making a reasonable offer for the purchase or acquisition by other arrangements, satisfactory to Portugal, of the territory thus awarded."

SUMMARY OF BRITISH POSITION IN THE MEDITERRANEAN SEA AND RED SEA

It remains to sum up the British position in the Mediterranean-Red Sea route in the light of the foregoing and of recent events. The breakdown of the mechanism for maintaining peace which was provided by the League, the conquest of Abyssinia and the maintenance there and in Libya of large military and air garrisons produced a new and more highly charged atmosphere in Mediterranean affairs from 1935 onwards. The considerable expansion of Italian naval, military and air strength and the great geographical advantages which Italy possesses in flanking the wasp waist of the Mediterranean; the vulnerability of British shipping to air and naval attack in that region; the proximity of Malta to Italian air bases, and the construction of a new military road from Tripoli through Libya to the borders of Egypt created new problems of defence. Internal security problems in

Malta and Palestine add another complication. At the western end of the Mediterranean Italian interference in the Spanish civil war raised a fear lest it should be followed by the establishment of Italian bases in the Balearic Islands or Spanish Morocco, and a consequent serious threat to British security in that vital region.

On the other hand, however, the Anglo-Egyptian Treaty of 1936 (see page 306) placed British and Egyptian relations on a much firmer and more friendly basis. The Anglo-Italian Declaration of 1936, by which both governments agreed to respect and maintain the territorial *status quo* in the Mediterranean removed, it may be hoped, the dangers of Italian naval bases being created near the western end of the Mediterranean. Ibn Saud of Arabia has made treaties establishing friendly relations with Iraq and Egypt (1936), and removing causes of conflict which might disunite these British allies.

Further, friendship and mutual interests bind France and Great Britain closely together and it is difficult to imagine a war in the Mediterranean in which these two great democracies would be on opposing sides.

Indeed, should Great Britain become involved in a war with a great Mediterranean power it can reasonably be assumed therefore that the British navy would have the use of many foreign ports in the Mediterranean and would not be confined only to those, such as Gibraltar and Malta, which are situated in British territory.

In the event of such a war taking place there would be three possible courses of action for Great Britain. The first—the complete abandonment of the Mediterranean-Red Sea channel, holding merely the two entrances from Gibraltar and Aden—would be an expedient of desperation, only to be contemplated in the event of a most serious threat to British security simultaneously in the Home Waters and Far East as well as in the Mediterranean. While it would release large naval, military and air forces for use elsewhere, this would leave, to the mercy of the Power controlling the Mediterranean, Egypt, Palestine, Malta and Cyprus and its effects on British prestige in the Mohammedan world would be catastrophic.

The second course, less drastic, would be to control the

western end from Gibraltar and the eastern entrance from Egypt, Palestine, the Sudan and Aden, bottling up the fleet of the opposing Power and cutting its line of communications to important sources of supply and to its possessions and garrisons beyond the Suez Canal. This, while not entailing the abandonment of Malta, would require the construction of at least one fleet base at the eastern end of the Mediterranean, either at Alexandria, Haifa or Cyprus. The difficulties of keeping our naval, military and air forces at the eastern end supplied would be considerable but could be reduced by close co-operation with India, Australia, New Zealand and South Africa. Indeed, if such a policy were necessary the desirability of expanding the facilities of these countries as manufacturing and supply bases is self-evident.

The third course of action is the one which is most in keeping with British policy in the past. It is by adequate preparations and re-armament to ensure the security in time of war of at least all essential naval, military and air traffic through the Mediterranean, diverting ordinary commercial traffic to the Cape route in order to reduce the burden on the navy. This course of action would entail making Malta, by every possible device, reasonably secure from air attack, providing adequate forces for the defence of Egypt and Palestine and maintaining in the Mediterranean a fleet of ample strength to carry out its commitments. In this case, also, a new base at or near the eastern end to supplement Malta would be desirable.

The effects on commercial traffic of diverting it to the Cape route would not be vitally serious. The amount of traffic concerned would be only a small fraction of the imports into Great Britain and other and nearer sources of supply could be tapped in the case of some of the commodities affected. Obviously, however, whichever of the three courses of action were to be pursued, the protection of the Cape route would be essential and, for that reason, the development beforehand of adequately defended ports at harbours such as Freetown, Takoradi, Walvis Bay, Cape Town, Durban, Mombasa, etc., is desirable.

CHAPTER IX

LINES OF COMMUNICATION. THE ATLANTIC OCEAN AND THE CARIBBEAN SEA

THE North Atlantic lies between the great industrial population of Western Europe and the 137 millions who inhabit Canada and the United States. Great Britain, which is spreadeagled across the most direct communications between the two continents, and which possesses splendid harbours with deep water facing both, ample coal resources and great industries, is well placed to share in the trans-Atlantic traffic. Even were it not the citadel and metropolis of an Empire, its position relative to Europe and North America and its own resources and manufacturing capacity must make it a great country, and the English Channel would still be the most important waterway in the world.

In regard to the South Atlantic, its position is at least as favourable as that of any other great commercial Power. The South American continent is so far to the east of North America that the longitude of its western coastline is approximately the same as that of the east coast of the United States. The ports of the south of England are therefore as near to South American ports as are those of the United States, while they are nearer to the harbours of any part of Africa. The British Isles are consequently well situated for competition in sea trade on this ocean ; and this is reflected in the variety and importance of our interests in South American States.

The chief lines of our overseas trade in the Atlantic, apart from the first section of the route to the East, by Gibraltar, are as follows :—

- (a) The great wheat, petroleum and cotton routes from the United States and Canada, starting from a terminal area which extends from the St. Lawrence (Cape Race) in the north to Sandy Hook in the south. Halifax in Nova

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Scotia lies near the centre of this area, and Bermuda rather to the south-east of it.

- (b) The meat route from South America, starting from a terminal area off the Plate, where traffic from the Cape Horn route (see (e)) makes a junction with the lines from South American ports. The only British possession in the neighbourhood of this area (but not very near) is the Falkland Islands.
- (c) The West, South and East Africa routes bringing nuts, vegetable oils, gold etc., and joining (b) in a region round the Canary and Cape Verde Islands. Freetown in Sierra Leone flanks this focal region, as does also the French naval and air station of Dakar.
- (d) The routes from the West Indies, Mexico, Venezuela and the Panama Canal, bringing sugar, petroleum (from Mexico, Venezuela and Trinidad) and mutton (from New Zealand). These routes are flanked in the Atlantic not very closely by Bermuda.
- (e) The now comparatively unimportant Cape Horn route.

On or near each of these routes we possess important harbours, either defended, or capable of being developed as defended harbours in time of war. These are the following : On (a), Halifax ; (b), Freetown ; (c), Freetown and Simons-town ; (d), Bermuda and Kingston ; (e), Port Stanley (Falkland Islands).

THE IMPORTANT BRITISH HARBOURS AND BASES IN THE ATLANTIC

If the direct winter route from New York to Plymouth is *Halifax* traced on a globe, it will be found to pass fairly close to the coast of Nova Scotia, and Halifax, the base of the Royal Canadian Navy, flanks the chief routes across the North Atlantic. It has a good ice-free harbour, covering 10 square miles, amply provided with dock accommodation. Since 1905, when the Imperial garrison was removed, Halifax has been fortified and garrisoned by the Permanent Active Militia of the Dominion. Its communications by rail with the industrial centres of Canada are by the Inter-Colonial Railway (Canadian National Railways), which—unlike the Canadian

Pacific—does not pass through United States' territory. Should this route be menaced, Halifax has good sea communication with Montreal by the Gulf of St. Lawrence, except during the winter.

Bermuda

Bermuda (capital Hamilton) flanks, not very closely, the direct route from Plymouth to the Panama Canal. There is a naval base and dockyard suitable for cruisers on Ireland Island, about 600 miles from the coast of North Carolina. It is almost equally distant from Halifax, Boston, New York and the Bahamas, and is a valuable connecting link with our West Indian possessions. Its distance from the chief base of supplies in Great Britain makes it doubtful whether the naval base could be used for a large fleet, as the movement of supplies from Great Britain necessary for such a concourse of vessels would be dangerous. Further, it is not developed as a first-class base; much dredging would be necessary before capital ships and large transports could enter; supplies would have to be accumulated, and any attempt in time of peace to develop it would be regarded by the United States as a threat to American interests. The natural harbour accommodation is large, the sea entrances through the coral reefs narrow, and with the use of minefields and submarines the islands could be made of great strength. Should an airship route from England to the West Indies be established, Bermuda might perhaps be a port of call. Recently a regular air service to New York has been established.

Port Stanley

The Falkland Islands, about 500 miles to the N.E. of Cape Horn (capital, Port Stanley) flank the approach to the Pacific by Cape Horn, and, though not defended or garrisoned, possess a valuable fuelling and wireless station at Port Stanley. There is direct wireless communication with Great Britain.

Freetown

The fuelling port of Freetown, situated in Sierra Leone, is practically half-way between Plymouth and Cape Town, and forms a naval link between the two bases of Gibraltar and Simonstown. It flanks the approach from the northern to the southern Atlantic, at a region where the width is about 1,500 miles, and not far from the focal area caused by the junction of African and South American routes.

THE CARIBBEAN SEA
THE WEST INDIES

The expansion of the United States and the opening of the Panama Canal have diminished the strategic importance of the British West Indies. Up to the year 1898, when the Spanish possessions changed hands, we were the greatest power in the Caribbean Sea ; but the United States' virtual protectorate over Cuba, Haiti and Santo Domingo, its annexation of Porto Rico and purchase of St. Thomas, St. John and Santa Cruz, together with its protectorates over Panama and Nicaragua, and the construction of naval bases to protect the Canal, have made the United States paramount in those waters.

Nevertheless our interests there are still considerable.

The West Indian Islands form roughly a semi-circle, commencing near the mouth of the River Orinoco and comprising Trinidad and Tobago, the Windward Islands, Barbados, the Leeward Islands ; Martinique and Gaudeloupe (French) ; the Virgin Islands (U.S.A.),¹ Porto Rico (U.S.A.), Haiti and San Domingo (U.S.A.), Cuba (U.S.A.), together with the Bahama Islands, lying to the north of the semi-circle and Jamaica lying within it. They are widely scattered, the length from north to south being 1,300 miles and from east to west 900. The British possessions are :

<i>Name.</i>	<i>Including :</i>	<i>Capital</i>	<i>Exports.</i>	<i>Remarks.</i>
Bahama Islands .	New Providence Watling Island	Nassau	Sponges to U.S.A	
Jamaica . .	The Cayman Is Turks & Cai cos Is	Kingston .	Bananas, fruit raw sugar rum to Can- ada and U.K	Cable to Bermuda and Halifax. Port Royal (Kingston) is a naval defended fuelling station, 4,700 miles from Plymouth.
The British Lee- ward Is. (the re- mainder of the Leeward Is. being mainly French)	Antigua & An- guilla, St. Kitts, Nevis, Montserrat, Dominica Barbuda	St. John ..	Limes and sugar	
The British Wind- ward Is.	St. Lucia .. St. Vincent, Grenada and the Grena- dines	Castries	Sugar, molasses etc.	Castries, one of the finest natu- ral harbours in the world, a coaling and oil station.
Trinidad	Trinidad Tobago	Port of Spain	Asphalt, petro- leum, also sugar, rum, and cocoa, coconuts	For petroleum see Chapter III. A Government floating dock and workshop at Port of Spain which is unde- fended

¹ Divided between Great Britain and U.S.A

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<i>Name.</i>	<i>Capital.</i>	<i>Export.</i>	<i>Remarks.</i>
Barbados Bridgetown	Sugar, molasses & "Sea Island" cotton used for finer types of cotton goods etc.	
And on the mainland British Honduras	.. Belize	Mahogany	About the size of Wales, consists of flat coastal plain, central uplands and high wooded interior
British Guiana	.. Georgetown	Sugar, gold and rubber, also molasses, rum, rice, diamonds, timber, bauxite and balata	About the size of Great Britain. Physical geography similar to British Honduras

*Population of
British West
Indies*

The population of the British West Indies is about 2,000,000, to which should be added 51,000 in British Honduras and 310,000 in British Guiana.

Of this total the inhabitants of British extraction represent only about 5 per cent. of the population, the remainder consisting mainly of people of Negro blood, together with some Indians and Chinese.

*Proposals
for Con-
federation of
British West
Indies*

Proposals have been made from time to time to combine the British West Indian Islands under one central Government. At present each group of islands has its Governor and a number of officials, some of whom might be eliminated if a central Government could be introduced. It has been urged that a confederation would lead to greater development of those common trade interests, ports, communications etc., which are at present neglected. One difficulty in the way of such a scheme is the fact that the British West Indian Islands are not compactly grouped, but are spread out over a very large area, and that the degrees of progress and political status vary greatly in the several groups. Thus, while the Bahamas and Barbados have had for many years almost complete self government, the island of Trinidad possesses only a very limited control over its own affairs. Further, most of the trade of the islands is with the United States, Great Britain and Canada, and there is little inter-Colonial trade between the several groups to act as an economic bond, or stimulate common interests.

The success of a confederation would depend in part on the provision of the better facilities for communication between the various groups already referred to. A step in this direction

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was taken in 1924 by the extension of the All-Red cable route from Turks Island to Barbados, with branch lines to Trinidad and British Guiana, which placed three of the colonies in direct communication with Jamaica, Bermuda and Halifax. Wireless communication has also been established between the various groups.

But the differences in outlook and local conditions, the demand for local tariff autonomy in each group and the general lack of desire for a union between the various colonies block the way towards confederation. Hence, a Royal Commission reported in 1933 against any general scheme of union and merely recommended that the Leeward and Windward Islands should be united under a Governor whose Headquarters should be at St. Lucia. This, they considered, was a practicable and desirable measure which might prove to be an initial step towards further schemes of confederation.

In addition to British Honduras and British Guiana, there are important British interests in Central and South America. Up to the time of the war British investments in Mexico and in the South American States were very great, and though the war period and the lean years after enabled the United States to strengthen her position particularly in Mexico, Chile, Bolivia and Venezuela, British capital and enterprise are still foremost in Argentina and Brazil. Even to-day, in spite of economic barriers, Argentina and Brazil together take more British goods than are imported by Canada or Australia. Argentina, in particular, as a country in which a great deal of British capital is invested in railways, banks, cold storage, ranches, etc., and from which at present the bulk of our supplies of chilled beef is obtained, is closely connected with Great Britain by financial ties. Its attitude in any war in which Great Britain is involved is therefore a matter of great importance.

THE EXPANSION OF THE UNITED STATES

The expansion of the United States in territory, overseas trade and naval power, has been the most significant feature of the Atlantic lands during the nineteenth and twentieth centuries. Within fifty years of its inception as an independent state it had, by conquest, purchase and occupation,

increased its territory on the mainland of America threefold. A period of internal adjustment and development followed, during which the vast resources of the country occupied the energies of its people almost to the exclusion of external interests.

After the Spanish-American War, however, there came a period of colonial expansion, the results of which are shown in the following table :-

<i>Name</i>	<i>Date.</i>	<i>Relationship.</i>	<i>Area in sq miles.</i>	<i>Population.</i>
Hawaii ...	1898	Annexed ...	6,450	250,000
Cuba ...	1898	Protectorate ...	44,000	2,900,000
Porto Rico ...	1898	Annexed ...	3,600	1,250,000
Philippine Is	1898	Annexed ..	115,000	8,500,000
Guam ...	1898	Annexed ...	210	14,500
Tutuila (Samoa)	1899	Annexed ...	80	7,300
Panama ...	1903	General supervision	32,400	450,000
Santo Domingo	1907	Supervision of finances and administration	18,500	955,000
Haiti ...	1915	Supervision of finances	11,000	2,500,000
Nicaragua ...	1913	Virtual Protectorate		
	1916	Grant of canal rights and naval bases to U S A	49,500	746,000
¹ Virgin Is ...	1917	Ownership by purchase	130	28,000
TOTALS			280,870	17,600,800

*The
Monroe
Doctrine*

This expansion was partly the result of a desire to safeguard the American continent from any form of occupation or exploitation by non-American Powers. It arose as a corollary to that Doctrine first enunciated by President Monroe in 1829 :

“ The American continents, by the free and independent conditions which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European Powers.”

In the hundred years which have elapsed since its enunciation the Monroe Doctrine has gradually increased in scope.

To-day it may be said to embrace the whole American continent and all islands adjacent thereto. It includes all territories near the Panama Canal, and there is no doubt but that it would be invoked, if necessary, to include the Galapagos

¹ Virgin Is. (U S A) include St Thomas, St. Croix, St John, and about 50 islets.

Virgin Is. (British) include Tortola, Virgin Gorda, Anegada, Jost Van Dykes, and about 30 islets

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Islands or any other group from which an attack on the American Continent might be launched. It refers not merely to territorial aggression, or military attack, but also to any financial and commercial inroads which might be used for political purposes or the acquisition of territory. Its sole interpreter and guardian is the United States. It is, in fact, difficult to draw any distinction between the Doctrine, as it now stands, and a declaration that the whole of the American Continent is loosely under the protective wing of the United States. As such, it has been regarded until recently with suspicion by the larger South American states and particularly by Argentina, Brazil and Chile, who feared that it might be invoked as an excuse for interference in their internal affairs. Recently, however, the government of the United States has made every effort to remove this impression, and these efforts, together with the breakdown of the League, have brought the American countries more closely together.

The expansion in territory of the United States has been no more remarkable than its growth in population and trade. Thus in 1800 the population of the United States was 8 millions ; in 1900 it was 97 millions ; to-day it is over 123 millions, or including its colonial possessions, 137 millions.

*Growth of
Population
and Trade*

It is the chief producer in the world of 13 important minerals, including the basic commodities, coal, iron and petroleum. It is the chief producer of cotton, wheat and maize. Nearly every important mineral is found in its territory, and the only raw materials of great importance for which it is dependent on external and foreign sources are rubber, tin, nickel, tungsten and manganese.

Its total foreign trade is second only to that of the British Empire. It owns 10 million tons of ocean shipping to-day as against 2 million tons in 1914.

Between 1914 and 1918 American naval tonnage increased by more than 50 per cent. ; and it was clear that the United States was no longer content to have a navy inferior in size to any other Navy in the world. Its desire for naval equality with the British Empire was chiefly based on the necessity for safeguarding the foreign trade of the United States in time of war ; and for ensuring the free passage

*Growth of
Naval
Power*

of American cargoes to any port, should the United States be either a belligerent or a neutral. No doubt, national prestige also, and the obligations implicit in the Monroe Doctrine, contributed to the desire for a large navy.

Equality between the Navies of the British Empire and the United States was agreed on in principle, with regard to capital ships and aircraft carriers in the Five Power Naval Treaty signed at Washington in February 1922, and later extended to other classes of naval vessel in the London Naval Treaty of 1930. Though these two treaties have now been terminated, the principle still holds good and competition in naval armaments between the United States and the British Empire is ruled out of the policies of both countries. War between them is regarded as inconceivable.

EFFECTS ON THE CARIBBEAN SEA

The results of the expansion of the United States in territory and sea power have been far-reaching, and nowhere more so than in the Caribbean Sea.

The routes for shipping passing from the Atlantic to that sea are as follows :—

- (1) The Florida passage, between Florida and Cuba, which is the natural route for traffic from the east coast of the United States, to the Caribbean Sea.
- (2) The Windward passage, between Cuba and Haiti, across which lies Jamaica with its British defended fuelling station—Port Royal, Kingston.
- (3) The Mona passage, between Haiti and Porto Rico.
- (4) The South-East passage between Trinidad and Barbados, which is the natural route for traffic to the Canal from the east coast of South America.

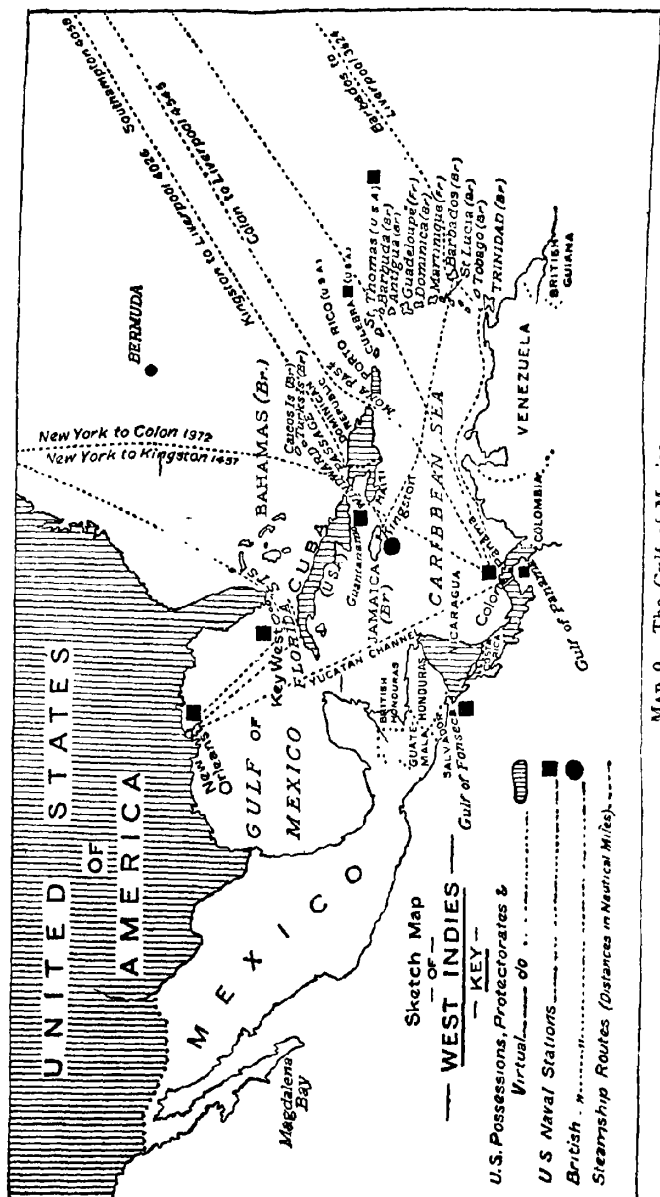
*American
Naval Bases
near the
Canal*

The United States' naval bases and stations in this region are as follows :—

New Orleans—on the mainland.

Key West—at the end of the string of Florida islands now joined by a concrete viaduct, and in railway communication with the mainland. Flanks the Florida passage.

Guantanamo—at the eastern end of Cuba ; flanks the Windward passage.



MAP 9.—The Gulf of Mexico.

Culebra—an island off Porto Rico. Flanks the Mona passage.

St. Thomas Is.—flanks the South-east passage.

Colon—guards the Caribbean entrance to the Panama Canal.

The Gulf of Mexico and most of the Caribbean are therefore now enclosed within a ring of American bases and inside this ring is the only fortified British harbour in that region, the oil fuelling port of Kingston in Jamaica.

The obviously predominant situation of the United States has been well described by an American writer. "The Caribbean was an area of contest for centuries—practically all maritime nations have or had holdings there; practically all fought for supremacy. But when the United States secured Porto Rico and was practically assured of the alliance of Cuba and the Dominican Republics, Europe's interest flagged. . . . The trained statesmen and strategists realized the hopelessness of the contest. Even Great Britain, which had theretofore demanded an equal share in any canal that might be constructed, and had treaties guaranteeing this, changed her policy completely.

"The chain of islands from Cuba to the Virgins, gives us not only protected sea routes two-thirds of the way round the Caribbean, but also an excellent air route. These, with the proximity to our bases and supplies give to the United States an advantage that is preponderating. Interruption of our communications is almost impossible, and would have to be of considerable duration in order to be serious because of the size and resources of the islands in the chain. The communications of the enemy would be constantly threatened from flank and rear.

"The conclusion seems obvious that, in the present state of development of South America, Panama's strategic position is defensively one of the strongest in the world."¹

*Britain and
the United
States*

Both British and American interests in the Atlantic are great; in Britain's case they are vital because her sea routes from every foreign country outside Europe and every British Dominion and dependency abroad must cross the Atlantic somewhere. The advent of the United States as a naval power of equal strength is therefore an event of great importance.

¹ Article on "The Strategic Position of the United States," by Colonel C. E. Kilbourne, Coast Artillery Corps, in the *Coast Artillery Journal* (of the U.S. Artillery), May, 1927.

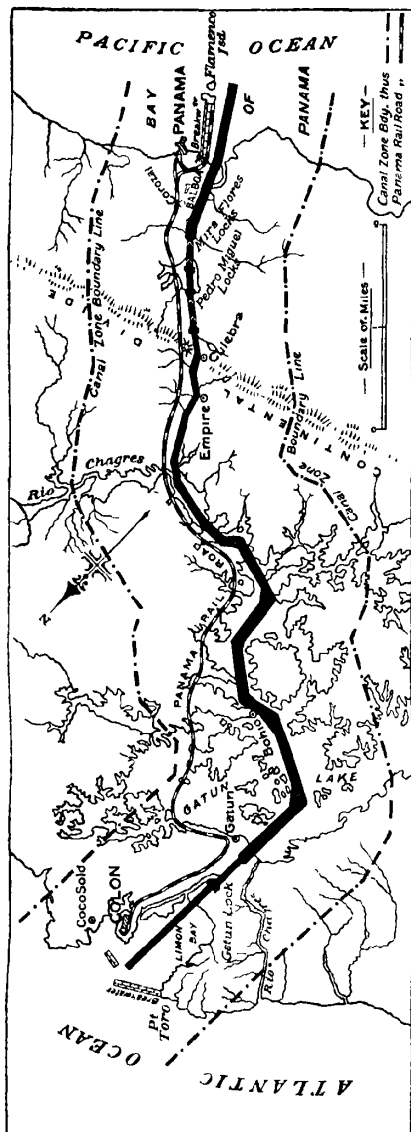
It must be remembered, however, that British foreign policy is based on the assumption that war with the United States is inconceivable, that 3,000 miles of ocean separate the main bases of the Two Powers, that neither could operate with success within a thousand miles of the other, and that both have too many hostages to fortune to risk a conflict.

THE PANAMA CANAL.

The Panama Canal, 50 miles long from deep water to deep water, runs through a zone 10 miles in width, granted in 1903 by the Republic of Panama to the United States in perpetuity, in return for a guarantee of independence and a money payment. This grant did not include the cities of Panama and Colon, but the United States is allowed to control them as regards sanitation and police. Though, by the Hay-Pauncefote Treaty, made between Britain and the United States, in 1901, it was agreed that the Canal, when constructed, should be neutral, "free and open to the vessels of commerce and of war of all nations, in peace or war, on terms of equality," the American government obtained the right to take such measures as are necessary for its local protection; and, interpreting this widely, have depopulated the canal zone of all landowners and made it a military reservation and fortified area.

Indeed, since it was first opened on August 15th, 1914, the fortifications and garrison have been greatly increased and it is now one of the most strongly defended regions in the world. There is, as the outworks of defence, the ring of American bases in the Caribbean, from Key West to St. Thomas, which has been described. Then, in the Canal zone itself, Colon and Balboa are heavily fortified and the latter is an American naval base on the Pacific. A transisthmian railway runs parallel to the Canal from end to end, providing a means for the concentration of troops at either terminal, and a transisthmian motor road is at present under construction. Coco Solo¹ is the site of a great air station: there are concrete barracks at each lock and at the terminals, and a regular garrison is situated in the Canal zone. As the population of the Republic of Panama is only about 450,000 it is obvious

¹ Near Colon.



MAP 10.—Panama Canal.

The entire length of the canal from deep water in the Atlantic to deep water in the Pacific is about 50 miles. Coming from the Atlantic, vessels traverse Limon Bay by the Approach Channel (seven miles) to Gatun, where they pass through a flight of three locks, and are thus lifted to the level of the Gatun Lake, an artificial lake covering 164 sq miles which was formed by the construction of the Gatun Dam and the subsequent accumulated floodings of the mountain streams. Through the Gatun Lake vessels steam at full speed for a distance of about 24 miles, thence passing through the Culebra Cut,¹ over a distance of about nine miles to Pedro Miguel Locks. Here they are lowered 30 feet, entering a small lake over which they steam $1\frac{1}{4}$ miles to Mira Flores, where they are again locked, this time to the sea-level channel ($8\frac{1}{4}$ miles) by which they pass to the Pacific Ocean.

Its length is 50 miles, from deep water to deep water, minimum depth 41 feet, and average time of transit 7-8 hours

¹ Now generally called the Gaillard Cut

that so great a concentration of naval and military force is not required for internal security duties only, but is there because the Panama Canal is the strategic neck of the United States. By means of it, American commerce can be carried much more cheaply from the eastern manufacturing region to the western ports than by rail across the continent; and the United States can now concentrate her entire naval strength in either the Pacific or Atlantic nearly three weeks more quickly than was possible before the Canal was opened.

The effect of the Panama Canal on sea routes from Great Britain is mainly in relation to the west coast of America and to New Zealand. All ports north of Panama on the American coast, such as Vancouver, are brought approximately 6,000 miles nearer to Liverpool; all ports south of Panama are brought on an average 2,600 miles nearer. The harbours of New Zealand are brought 1,500 miles nearer to Great Britain. On the other hand, it does not bring any port in the East Indies, or any ice-free port in Asia closer to this country.

The gain of the United States is of course much greater. The Canal reduces the distance by sea between New York and all ports on the western seaboard of America north of Panama by about 9,000 miles, and in the case of the western ports of South America the gain averages nearly 5,000 miles. New York is now much nearer by sea to Japan, the Philippine Islands, New Guinea, and all the eastern ports of Australia and New Zealand than it was. Wellington in New Zealand has been brought 3,000 miles closer to New York than it is to Liverpool. Sydney which previously was 1,500 miles nearer to Liverpool (*via* Suez) than to New York (*via* Cape of Good Hope), is now 2,500 miles nearer New York than it is to Liverpool.

The effect of these changes is that the Panama Canal, as a link of communication for the trade of the Empire, is of importance chiefly in relation to British Columbia and New Zealand. The sea route from British Columbia to the home ports is lessened by 6,000 miles, and much traffic which would have gone by rail, 3,000 miles across the continent, to be shipped at Montreal, now takes the all-sea route through the Canal. If a line is drawn north and south through Regina, it separates the portions of Canada which naturally prefer the eastern and western routes. The cost of transport per ton

*Effect on
British Lines
of Communi-
cation*

*Effect on
American
Lines of
Communi-
cation*

*Effect on
British Trade*

from any point on this line, is approximately equal either by the Panama Canal or Montreal to Great Britain. The great value of this new route, to the part of Canada west of this economic divide, has been shown by the enormous increase in the amount of wheat shipped from Canada during the last few years by the Panama route.

*Effect on
Defence*

While the Panama Canal is of commercial use to us, its value to us from a naval standpoint is more doubtful. The two powers who are most likely to concern us in a war in that part of the world are the United States and Japan. If the former were hostile, the Panama Canal would be closed by its own fortifications at Colon and Balboa, as well as by naval activity in the Caribbean and Gulf of Mexico. If we were at war with Japan, and the United States were neutral or even our ally, the Panama Canal would still not possess advantages to compensate for the long journey across the Pacific, far from our important bases of supply. Even assuming that this journey might be comparatively safe, owing to the huge area of the ocean and the variety of routes which could be taken, the naval campaign would probably centre round our lines of communication with Australia and New Zealand, and the entrances to the Indian Ocean. Under these circumstances the region of operations would be in the neighbourhood of Singapore, and the shorter routes by the Suez Canal and Cape would be taken.

*Proposed
Nicaraguan
Ship Canal*

Prior to the construction of the Panama Canal by the United States, a survey was made of a possible canal route across Nicaragua. This proposed route would follow the San Juan River to Lake Nicaragua and thence run across land to the Pacific. The scheme, after much consideration, was shelved in favour of the shorter Panama route, but in 1916 the United States purchased a grant of the Canal rights from Nicaragua (over which it exercises a virtual Protectorate), together with the right to construct a naval base at Fonseca Bay at the Pacific end of the proposed canal and the lease of two small islands in this bay for defensive purposes. If traffic on the Panama route should become excessive, in the future, it is probable that the United States will proceed with the scheme.

Strategically, it would enable the United States Navy to

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concentrate in the Atlantic or the Pacific in a shorter time, as two entrances would be available instead of one; and the distance from Key West or New Orleans to the Gulf or California would be shortened by 600 miles. Further, recent earthquakes in Central America and recurring landslides near the Panama Canal have raised the fear that these disturbances or even air attack might put this Canal out of operation at some critical time and thus enormously handicap the U.S.A. navy.

THE UNITED STATES AND NEUTRALITY

The attitude of the United States in any great war is obviously a matter of very great importance, particularly as it is the chief source of many important commodities. Until recently that attitude was summed up in the phrase "the freedom of the seas," by which loosely was understood the right of American citizens to trade with neutrals or belligerents in a war in which the United States is neutral, in all commodities except contraband. The Italo-Abyssinian war and the breakdown of the League machinery, however, has brought about a change in the American attitude. Now it is considered that trade with belligerent countries is not worth the risk which it involves. Hence in 1937 a Neutrality Law was passed which enables the President to make it illegal for a citizen of the United States to export arms or munitions to belligerent countries, to lend them money, or to travel in a belligerent ship. He can also forbid at his discretion the export of any goods whatever to a belligerent country until they have been paid for. The importance of this is obvious. The United States intends to avoid any risk of being involved, whatever may be their moral judgment of the conflict, and Great Britain in time of war might find herself deprived of American sources of supply which were available between 1914 and 1917 (while the United States was a neutral).

CHAPTER X

THE PACIFIC OCEAN AND ITS PROBLEMS

The importance of the Pacific

THE Pacific Ocean is the longest, widest and deepest ocean in the world. From the Bering Sea to the Antarctic continent is over 9,000 miles: from Singapore to Panama is 10,500 miles. In area, it is nearly twice as great as the Atlantic, and larger than all the continents and islands of the world combined. The sea routes across it are correspondingly long, and its western shores are separated from the industrial centres of Europe and North America by half the circumference of the globe. These facts go far to explain the late development of intimate contacts between the countries round the Pacific and those around the Atlantic, a development which only became possible by the introduction of steam for shipping, and by the construction of transcontinental communications. To-day, it is no longer isolated, but has become a region of intimate contacts and conflicting interests, round which is grouped almost half the world's population. China, alone, holds nearly one quarter of the world's people. Further, the Pacific is bordered by territory belonging to the three greatest naval Powers; countries which have easy access to it produce the world's chief supplies of coal, petroleum, iron, antimony, tin, nitrates, rubber, wool, silk, wheat and many other commodities. Round it also are most of those areas which are still the least populated and least developed of the world's foodlands, and also some of the countries which are most densely peopled. It has, therefore, become involved in all the complex problems of international intercourse—population, food, raw materials, markets, military power.

The penetration of China

During the nineteenth century the exclusionist policy, previously followed by China, was broken down by force. As a result of the Treaty of Nanking (1842), which concluded "the Opium War," the five ports of Canton, Amoy, Foochow,

Ningpo and Shanghai were opened to foreign trade and residence, and the island of Hong-Kong was ceded to Great Britain. By the Treaties of Tientsin (1861), which followed "the Arrow War," Kowloon, on the mainland opposite Hong-Kong, was also obtained by Great Britain, and the principle of "extraterritoriality" was explicitly recognized by China. In 1861, Russia secured Vladivostok; in 1874 China lost her suzerainty over Annam to France, and in 1886 her suzerainty over Burma to Great Britain. In 1894, China and Japan went to war over Korea, and by the Treaty of Shimonoseki (1895) China ceded the Liaotung Peninsula (Port Arthur and Talienwan), Formosa and the Pescadores to Japan, and acknowledged the independence of Korea. Russia, backed by Germany and France, however, demanded that Japan should relinquish the Liaotung Peninsula because her retention of it would "destroy the political balance in the Far East," and the following year Russia obtained the right to use Port Arthur and some other Chinese ports, in case of war. In 1898, Germany secured the lease of Kiaochao for ninety-nine years, as an indemnity for the murder of two German missionaries. Thereupon, Russia sought and obtained a twenty-five year lease of Port Arthur, while Great Britain secured leases of the New Territory (beyond Kowloon) and Wei-hai-wei, and France that of Kwangchow. As a result of the Boxer Rebellion (1900), China was compelled to agree, *inter alia*, to the establishment of a fortified Legation quarter in Peking, with its own guards, and the maintenance of a foreign garrison on the Peking-Tientsin Railway.

While it was possible at the time to justify each of these events on the score of Chinese incompetence, her treatment of foreign merchants and foreign trade, the corruptibility of her officials and the nature of Chinese courts and justice, the mainspring of the process of Western penetration was the desire to secure a share in a rapidly expanding market and positions from which to exercise influence in what was realized to be an area of enormous importance in the future. Progressively, throughout the 19th century, China became a cockpit of international rivalries.

In the meantime, also, the lands round the Pacific were expanding in trade and population. Thus, in 1800 the white *Growth in Population*

population of Australia was 5,217, all settled in New South Wales: in 1931 it was 6,500,000. Similarly, in Canada, in 1800, it was about 400,000; to-day it is over 10 millions. The United States increased from 8 millions to 123 millions in the same time. China increased by 100 millions and Java by 30 millions. Harbours such as San Francisco, Vancouver, Sydney, Hong-Kong and Singapore, once ports only for local traffic, developed into harbours of international importance. Land communications were extended towards the Pacific. Transcontinental lines were constructed to connect the Atlantic and Pacific Oceans, and a Panama Canal was opened. During this period, also, all the island groups of the Pacific, not previously annexed, were partitioned between the various Powers.

*The rise of
Japan*

This European penetration of the Pacific lands was, in part, the cause of the extraordinary rise of Japan from a state of feudalism to the rank of a first-class Power. Modernization was adopted by the Japanese as an alternative to European exploitation. The feudal form of government was abolished in 1868. The first railroad was built in 1870. In 1872 universal military service was introduced. In 1875 she obtained from Russia the Kurile Islands, in order to round her dominion in the north; and in 1876 she seized from China the Ryu Kyu (Loochoo) Islands. After the war with China (1894-5) she obtained Formosa and the Pescadores, and Korea, until then a Chinese Province, was declared independent. In 1902 she made an alliance with Great Britain, by which the two countries promised that each would assist the other if attacked by more than one Power. This kept the ring for Japan in the event of a struggle with Russia which seemed to be impending over questions relating to Russian penetration into the peninsula of Korea. The struggle took place (1904-1905) and Japan, as victor, secured the lease of the Liaotung Peninsula and Port Arthur and obtained control of the South Manchurian Railway. At the same time she extended her territory northwards, by obtaining the southern half of Sakhalin (Karafuto). The material results of her victory were, however, the least important. The moral results were enormously greater. An Asiatic Power, for the first time in four hundred years, had defeated a great European

THE PACIFIC OCEAN AND ITS PROBLEMS 149

country ; and Japan began to realize the strength of her position. In 1905, and again in 1911, the Anglo-Japanese alliance was renewed in the different form of a simple defensive pact, by which each country agreed to assist the other if attacked, though exceptions were made which would have allowed Great Britain to stand aside in the event of a war between Japan and the United States. In 1910, Japan completed her control over Korea by annexation. When the Great War began, she stood loyally by the Anglo-Japanese Alliance and came to our assistance.

Another striking feature of the nineteenth centuries and the pre-war years was the rise of the United States as a colonial power chiefly in the Pacific. Alaska was purchased from Russia in 1867. In 1898 the Sandwich Islands were annexed and a naval base was established at Pearl Harbour. After the Spanish-American War, the Philippine Islands were purchased from Spain, and Guam was annexed at the same time, in order to provide a stage on their line of communication to America. Tutuila and some smaller islands of the Samoan group were also annexed in 1898. Later still, in 1903, a virtual protectorate was declared over the new republic of Panama and the American construction of the Panama Canal began. In 1913, Nicaragua became a protectorate and the United States, three years later, obtained the right to construct an isthmian canal through that country also and to defend it by a naval base at Fonseca Bay. Finally, in 1914, the Panama Canal was opened, giving a new gateway from the western world to the Pacific, of special value to the United States, because it enabled that country to concentrate its naval forces more rapidly in either the Atlantic or Pacific than was previously possible

Another event which marked a stage in the rapidly changing scene of the Pacific was the Revolution in China (1911-1912), the impetus for which was largely derived from a movement of westernized intellectuals in Canton, headed by Dr. Sun-Yat-Sen a professed Christian and the leader of the Kuomintang or People's Party. The boy Emperor of 7 years of age was compelled to abdicate, and an attempt was made to set up democratic and parliamentary Government on

*The rise of
the United
States as a
Colonial
Power*

*The
formation of
a Chinese
Republic*

Western lines. The almost immediate result was confusion. The Manchu Dynasty had been the only real bond uniting the many Provinces of China, and that bond had been destroyed. By 1916, two governments, one at Peking and the other at Canton (under Sun-Yat-Sen), were disputing the right to speak for all China, and representatives of both governments attended the Peace Conference at Paris in 1919. China, in fact, appeared to be drifting rapidly into a condition like that of India after the decay of the Mogul Empire.

The Twenty-One Demands In 1915, Japan took advantage of the preoccupation of the Powers in Europe and of the disintegration of China to increase her political and economic hold there. She presented "the Twenty-One Demands," which were embodied, after some modifications, in a treaty (May 1915). These demands gave to Japan all German rights in Shantung where there are important coal and iron fields; large coal and iron concessions elsewhere in China; and they forbade the cession of Chinese territory, coasts or islands to any other Power. The lease of the Liaotung Peninsula and Port Arthur—which was due to expire in 1923—was extended to 99 years; so also were the leases of the South Manchuria railway concessions. Japanese subjects might reside and travel in South Manchuria, and might lease land and engage in any kind of business there. Though most of the results with regard to China itself were abandoned later at the Washington Conference (1921), those with regard to Manchuria remained, and were regarded by the Chinese as having been extracted from a helpless China against her will and best interests.

The Russian Revolution 1917 In 1917, a new factor was introduced by the Revolution in Russia. Its immediate effect was to remove all Russian influence in the Far East for a time, but by 1921, with the new weapons of propaganda and infiltration, the U.S.S.R. had begun to re-enter the arena. Outer Mongolia became, in 1920, a member of the U.S.S.R., and communist doctrine began to spread in parts of China with amazing rapidity. At the same time, the Soviet government succeeded to all the Tsarist aims to ensure Northern Manchuria as a Russian sphere and the Chinese Eastern Railway across it as a secure link in the route to Vladivostok.

PROBLEMS CREATED BY POST-WAR SETTLEMENT

Some new problems were created in the Pacific lands by the distribution of the German possessions there, after the war. These German colonies were as follows :—

North of the Equator—Marianne or Ladrone Islands ; Yap and the Pellew Islands ; the Caroline Islands and the Marshall Islands.

South of the Equator—German New Guinea, with the adjoining archipelago, Nauru, and German Samoa.

By an agreement made with Great Britain in 1916, Japan was to obtain the German islands north of the Equator, and Great Britain all those to the south. This agreement was subsequently confirmed by the Peace Conference, which gave Japan the Mandates for the islands north of the Equator. Mandates for those south of the Equator were distributed as follows :—

To Australia—the mandate for German New Guinea with the adjoining archipelago ;

To New Zealand—for German Samoa (Western Samoa) ;

To the British Empire—for the island of Nauru.

As mandatory powers under the League of Nations, Japan and the British Empire were expected to observe certain conditions ; in particular, the islands must remain unfortified.

By this distribution Japan obtained a long salient into the central Pacific, between the United States and her most important colonial possession—the Philippine Islands. This was a matter of deep concern to the United States because it was felt that the various island groups mandated to Japan would make ideal bases for submarines, which could be used to sever the line of communication between the United States and the Philippines.

The acquisition of the Marshall Islands brought Japan *salut* 2,000 miles nearer to Pearl Harbour, and within 4,000 miles of San Francisco. It was a source of anxiety to Australia

and New Zealand also, because Jaluit in the Marshall Islands, which is almost equidistant from Japan, New Zealand and Brisbane, was regarded as suitable for the construction of a naval base. Japan had moved not merely 2,000 miles eastward towards the United States, but also 2,000 miles southward towards Australia and New Zealand.

THE POPULATION PROBLEM

From the beginning of the 20th century, the growth of population in Japan, and the problems which this growth entailed, increasingly attracted the attention of other countries, and raised apprehensions particularly in the United States and the British Dominions round the Pacific Ocean. Until 1868, the Japanese population had remained almost stationary for a long period, but with the introduction of a process of westernization and the development of industries it began to increase, and by 1900 some importation of food had become necessary. In the forty years from 1860 to 1900, the population had risen from 30 millions to 45 millions; it was continuing to rise at a steadily increasing rate, and by 1920, it was about 59 millions. By this time, stated in the form of a crude comparison with the total area of the country, the density of population per square mile was much greater than that of any other country round the Pacific, except Java; and, if the comparison was made between population and arable land, the result was still more striking.

How could Japan, in the future, meet the problems of maintaining this increasing population, not merely on the simple standards of the past but on the increasingly high standards demanded as a result of education? Could emigration and settlement in foreign countries provide a safety valve, or could the industrialization which produced the problem, provide the solution? These were questions which required answers.

*Anti-
Immigration
Laws*

With regard to emigration, apprehensions that Japan would attempt to solve her population problems by intensive settlement in foreign countries led the United States, Canada, Australia and New Zealand to erect barriers by legislation against the political and economic dangers of coloured immigration. The South American States still remained open and a regular flow of settlers to Brazil was possible, but this was a

trickle compared with the annual increase in Japan. In any case all these countries combined, even if they were opened, could only take a mere fraction of the annual increase of one million in the population of Japan.

There remained industrialization. This, however, implied raw materials and markets. As regards the first she was less fortunate than any other Great Power, even than Great Britain itself. Her domestic supplies of coking coal and of iron ore were and are insufficient; almost her entire requirements of wool, cotton, rubber, tin, petroleum and indeed of most minerals had to be imported from foreign sources, as well as steadily increasing amounts of food. Already by 1906 her virtual control over part of South Manchuria, as a result of the Russo-Japanese war, ensured some, though not adequate supplies at her hall door—coal from the Fushun mines, oil from oil shale in the same locality, the soya bean and wheat. There were great mineral resources in Shantung and other parts of China which might be tapped. The 400 millions who lived in China formed one of the greatest potential markets in the world, and a possible rival in industrial development which should be kept under control. Here were strong reasons for Japanese efforts to gain a pre-eminent position in China and Manchuria, even at the cost of resentment or active hostility on the part of other Powers. They might even lead to attempts to obtain special privileges and concessions which would be regarded as contrary to that principle of “the open door” in China, so strongly held by the United States and supported by Great Britain. Looking further afield, a desire for rubber, tin, iron ore and petroleum might lead Japan southwards to the Philippines, the Dutch East Indies and Malaya.

*Necessity for
Raw
Materials
and Markets*

THE WASHINGTON CONFERENCE (1921-1922).

These were some of the problems and apprehensions which formed a background to the Washington Conference, when it met in November 1921, to confer with regard to Naval Disarmament and the Problems of the Pacific. Obviously, the settlement of the relative naval strengths of the great naval Powers must depend to a great extent on the removal of apprehensions. A settlement of the political situation, in order to

produce confidence, had to precede or accompany naval limitation.

The chief political results of the Conference were embodied in two Treaties and an agreement :

*The Four
Power
Treaty*

- (1) The Quadruple Treaty, by which Japan, U.S.A., the British Empire and France, bound themselves to confer together in the case of any difference which might arise between any of them in regard to their "insular possessions and dominions" in the Pacific. It also contained a "third party clause" which stated that the four Powers will consider together any action to be taken in the case of a threat to these interests by an outside Power. Assurances were given by the Four Powers to Holland and Portugal of their intention to respect the possessions of these Powers in the Pacific. This treaty, which remains in force until it is denounced by one of the signatories, superseded the Anglo-Japanese Alliance, which was due for renewal in 1922, and against which a good deal of feeling had been expressed in both the United States and Canada where it was regarded as lining up Great Britain on the Japanese side.

*The Nine
Power
Treaty*

- (2) A Nine Power Treaty was signed by the United States, Belgium, the British Empire, China, France, Italy, Japan, the Netherlands and Portugal, relating to the principles and policies to be observed by these powers in matters concerning China. Its first Article contains in outline the principles to be followed :—

"The Contracting Powers, other than China agree —

- 1 To respect the sovereignty, the independence and the territorial and administrative integrity of China
- 2 To provide the fullest and most unembarrassed opportunity to China to develop and maintain for herself an effective and stable government
- 3 To use their influence for the purpose of effectually establishing and maintaining the principle of equal opportunity for the commerce and industry of all nations throughout the territory of China
- 4 To refrain from taking advantage of conditions in China in order to seek special rights or privileges which would abridge the rights of subjects or citizens of friendly states and from countenancing action inimical to the security of such states."

*Other
Nine Power
Agreements*

- (3) This was followed by an agreement, signed by the same Powers, relating to a revision of the duties levied on foreign goods at the ports of China, and also by

a resolution with regard to the abolition of extra-territorial rights. The Powers agreed "to relinquish extra-territorial rights when satisfied that the state of the Chinese laws, the arrangements for their administration, and other considerations warrant them in so doing." In other words they agreed that these rights, held by the Foreign Powers, of maintaining an "imperium in imperio," in concessions, settlements and elsewhere, should be abolished when China could guarantee orderly government, security and justice.

These agreements, it was hoped, would form a firm political basis for peace in the Pacific. The first ensured the friendly settlement of disputes with regard to insular possessions; the second was a self-denying ordinance with regard to seeking territory or special privileges in China; the third aimed at removing, as soon as circumstances would permit, the Chinese grievances with regard to the foreign control of customs and the privileged legal position held by foreigners on Chinese soil. On this basis it was considered possible to reach agreements on the naval situation which were embodied in the Five Power Naval Treaty.

The Five Power Naval Treaty, was signed by the British Empire, United States, France, Italy and Japan. The first eighteen articles of this treaty dealt with the limitation of naval armaments among the signatory Powers and are summarized later in this chapter. Article XIX refers to the Pacific and, on account of its importance, is given in full :—

"The United States, the British Empire and Japan agree that the *status quo* at the time of signing of the present Treaty, with regard to fortifications and naval bases shall be maintained in their respective territories and possessions specified hereunder :—

- (1) The insular possessions which the United States now holds or may hereafter acquire in the Pacific Ocean except (a) those adjacent to the coast of the United States, Alaska and the Panama Canal zone, not including the Aleutian Islands and (b) the Hawaiian Islands.
- (2) Hong-Kong and the insular possessions which the British Empire now holds or may hereafter acquire in the Pacific Ocean, east of the meridian of Long. 110° E. except (a)

those adjacent to the coast of Canada, (b) the Commonwealth of Australia and its territories, and (c) New Zealand.

- (3) The following insular territories, and possessions of Japan in the Pacific Ocean, to wit : the Kurile Islands, the Bonin Islands, Amami-Oshima, the Loochoo Islands. Formosa and the Pescadores and any insular territories or possessions in the Pacific Ocean which Japan may hereafter acquire."

"The maintenance of the *status quo* under the foregoing provision," the article continues, "implies that no new fortifications or naval bases shall be established in the territories and possessions specified : that no measures shall be taken to increase the existing naval facilities for the repair and maintenance of naval forces, and that no increase shall be made in the coast defences of the territories and possessions above specified. This restriction, however, does not preclude such repair and replacement of worn out weapons and equipment as is customary in naval and military establishments in time of peace."

The effects of this "*status quo*" arrangement on the naval situation of the various powers were important. The Hawaiian Islands were outside the scope of the agreement and Pearl Harbour could therefore be fortified and expanded as much as the United States desired. As regards Guam, the stepping stone between Pearl Harbour and the Philippines, a naval base there had been contemplated, but it had not been commenced, and, as Guam lay in the "*status quo*" area, no constructional works or fortifications could be erected. A travelling commission was selecting a suitable position for a naval base in the Philippines, but, by the Treaty, this could not be constructed. Dutch Harbour, an ice-free harbour in Unalaska, had been frequently mentioned by American naval experts as a potential naval harbour not far from the shortest sea route from San Francisco to Yokohama and only 3,000 miles from the latter. At the time of signing the Treaty, nothing had been done to develop it as a naval base, and, it also lay in the "*status quo*" area. Nor could Pago-Pago (Tutuila) in the Samoan group, which was unfortified in 1921, be fortified.

The British Empire was seriously affected also. The

oilfields of Sarawak, the coaling harbour of Labuan, the whole of British North Borneo and the island groups of the Pacific lay in the "*status quo*" area. Hong-Kong must remain "*in statu quo*." Its naval facilities for repair and maintenance could not therefore be enlarged above those existing in 1921. During the war larger battle cruisers were built; bulges and blisters were added as a defence against torpedoes or mines, and, by 1921, Hong-Kong had no docks capable of dealing with the repair and maintenance of the larger post-Jutland ships. As a result of this Treaty, measures to increase the dock capacity could not be taken. We were therefore left without a satisfactory maintenance base nearer than Malta, until such time as the necessary facilities should be constructed at Singapore, which lay outside the "*status quo* area."

If we now turn to the effect on the Japanese naval situation *Japanese
Bases* it will be found to have suffered little or nothing from the Treaty. The chief naval bases (Admiralties) are at Yokosuka, Sasebo and Kure on the main islands. There are naval harbours also at Maizuru, Ominada and Chinhaï (Korea). These were all outside the *status quo* area and were consequently unaffected. The only bases and harbours which were affected by the Treaty were a few subsidiary ones in Formosa and the Pescadores, which remained second-class bases as before. For Japan, therefore, the effect of the Treaty was to diminish the potentialities of Hong-Kong and to remove any possibility of the United States increasing the strength of their line to the Philippines by fortified harbours in Guam, Cavite Bay, etc. Japanese naval isolation had become greater than before, and could not be threatened except from bases very far distant. This is obvious from the following table of distances.

Yokohama to Pearl Harbour	...	3,390	nautical miles.
" " Singapore	...	2,900	" "
" " Sydney	...	4,500	" "
" " Auckland	...	4,800	" "
" " Vancouver	...	4,200	" "

This Five Power Naval Treaty was to remain in force until the 31st December, 1936, and could only be terminated then or after that date provided one of the Contracting Powers gave two years' notice of its intention to withdraw. Within one

year of the date, on which such a notice of termination was given, all the Contracting Powers would meet in a second conference. It will be seen later that Japan gave notice to terminate this treaty.

EVENTS SUBSEQUENT TO THE WASHINGTON CONFERENCE

Disorder in China

Up to 1925, the hopes that the Washington Conference had allayed all the incipient dangers to peace in the Far East appeared to be justified. It was true that the internal condition of China continued to deteriorate, that a civil war broke out in the north in 1922, and that the Canton government in the south was hand in glove with Soviet Russia, but, on the whole, the foreign "concessions" and foreign traders were very little affected by these events. In 1925, however, the spirit of nationalism took a definitely anti-foreign tone, as a result of incidents arising out of strikes in mills at Shanghai and Shameen (Canton). For a time this was focussed chiefly on the British as the largest holder of territorial interests in China; in 1927 our concession at Hankow was attacked and was evacuated, and, in the same year, the British government was forced to send a Defence Force of three Brigades to Shanghai to protect British and foreign interests in the International Settlement from an attack by one of the various Chinese armies operating in that region. This sign of British determination to defend its interests went far towards dissipating the idea, produced by our evacuation of the concession at Hankow, that Great Britain could be hustled out of China.

In 1928, the anti-foreign feeling veered strongly against Japan as a result of an engagement between some Japanese troops, who had been dispatched to Shantung, and part of one of the Chinese Armies. In the same year, a semblance of order arose out of chaos; a National government was proclaimed at Nanking (the new capital), and later (1931) a constitution was adopted by a People's Convention and promulgated. Communist governments continued to exist, however, in Kiangsi and Fukien; large numbers of discharged soldiers in the north took to banditry as an occupation, and famine and floods in 1930-1931 added to the difficulties of government. At this juncture, the course of events took a more ominous turn in Manchuria.

MANCHUKUO

Manchuria, or the three Eastern Provinces of China, Fengtien, Kirin and Heilungkiang, had for thirty years been a frontier land subject to converging pressures by three nations, each of which had important economic and strategic interests there. As a result of the war of 1894-1895, China had ceded to Japan Port Arthur and the Liaotung peninsula, gains which had, in the next year, to be relinquished under pressure from Russia, Germany and France. Russia, thereupon, stepped in and obtained leases for 25 years of Port Arthur and the peninsula and the right to construct a railway from Port Arthur to Harbin, to connect with the shortest branch of the Trans-Siberian railway to Vladivostok. By the Treaty of Portsmouth (1905) which concluded the Russo-Japanese war, Japan acquired the leases for Port Arthur, the peninsula and the railway as far north as Changchun (the South Manchurian Railway), and the right to maintain a force of about 15,000 men in the railway zone. In the same year an informal arrangement was made between Japan and China, by which the latter agreed not to construct any competitive lines in the neighbourhood of the South Manchurian Railway. Russia remained the dominant influence in Manchuria north of Changchun, and the Chinese Eastern Railway, built by Russia, was the shortest route to Vladivostok. By the treaty which ensued from the "Twenty-one Demands," in 1915, Japan had the leases for the territory and railway extended to 99 years.

For Japan, South Manchuria was a first line of defence, a buffer between herself and Russia, the spread of ^{Japanese} ^{Interests} whose communist doctrine in China she regarded with dismay. As a source of food it could supply not merely the soya bean, but millet, maize, wheat, barley and rice. The Fushun mines contain high quality coal easily mined in an open quarry, and the coal is covered by a layer of oil shale rich in petroleum. The South Manchurian railway and these mines were financed by Japanese capital, of which more than £200 millions is invested in the region. The harbours of Dairen (Dalny), Port Arthur, Hulu-tao and Newchwang were developed by Japanese enterprise, and Dairen is now the second greatest port on the mainland of Eastern Asia, after Shanghai.

Further, Manchuria is as large as France and Germany combined. At present it has only 30 million people ; it might well hold 100 millions, and is therefore a great potential market, as well as a field for Japanese enterprise. It might also be capable of holding Japan's surplus people in the future, though this is doubtful as the extremes of temperature found there are not favourable to Japanese settlement, and Japanese settlers would have to compete with the even more frugal and hardworking Chinese farmers, already there. Its climate is, however, broadly similar to that of Korea, and it could be used for Korean emigration.

*Chinese
Interests*

At the same time, it has, for three centuries, been part of the Chinese Empire. Twenty-eight out of its thirty million people are Chinese, and, into it, each year, has been flowing a stream of immigrants from the overcrowded parts of northern China, to the extent of nearly a million a year. Historically and racially, it is an integral part of China.

*Russian
Interests*

For Russia, an important interest was the Chinese Eastern Railway, built by Russia with Russian and Chinese capital across northern Manchuria, as an alternative and shorter route to Vladivostok than the Amur line further north which skirts the northern boundary of Manchuria. This railway runs through land of great agricultural possibilities, and has, in the past, tapped this region towards the Russian port. A Manchuria under Japanese control would mean the abandonment of this railway as a Russian enterprise and as a strategic route ; it would also gravely endanger the security of Vladivostok, whose only communication with Russia would then be by the Amur branch of the Trans-Siberian line.¹

*The Dispute
between
China and
Japan*

It is unnecessary in this brief sketch to describe in detail the immediate causes which led to the complete occupation of all Manchuria in 1931-1932 by Japanese forces. From the foregoing, however, it is possible to surmise what were the chief underlying causes. Following the alleged cutting of the South Manchurian line near Mukden in September 1931, Japanese troops began to advance and occupy various centres outside their railway zone. By February 1932, they were masters of most of the important towns of Manchuria ; and, in the same month, the new state of Manchukuo was formed, under

¹ A second line, farther to the north, is now being constructed.

Japanese protection; Changchun, with the new name of Hsinking, was chosen as its capital, and Henry Pu Yi, the Manchu ex-Emperor of China, was made its first regent. During these same months, the anti-Japanese boycott in China, accompanied by disorder and murder, led to a Japanese attack on the native city of Chapei (Shanghai), and active hostilities between considerable Japanese and Chinese forces in that region.

In the meantime China had appealed to the League. The Lytton Commission came and went. In its report (Oct. 1932) it stated that Manchuria was an integral part of China, and suggested measures for the establishment of peaceful conditions there and the safeguarding of Japanese interests. Japan refused to accept the findings, even when reinforced by a similar and unanimous decision of the League,¹ and handed in her notice of withdrawal from membership of that body, to become effective in February 1935. None of the sanctions of the covenant were used against her, and her successful defiance increased her prestige in the East and weakened still further the influence of the League. Between February and April 1933, she claimed and occupied the Chinese province of Jehol, which divides Manchuria from the Great Wall of China, as part of the new state of Manchukuo, and the Tangku Truce confirmed this occupation and created a narrow demilitarized zone south of the Wall.

After her withdrawal from the League, it was announced *Japan and the Mandates* that she intended to retain her mandates as colonies, on the ground that her title to them came, not from the Peace Treaties, but from an agreement made with Great Britain and France in 1916. This raised apprehensions that she might erect fortifications or naval bases in them, as soon as the Five Power Naval Treaty expired in 1936. Indeed, some anxiety was expressed by the Permanent Mandates Commission in January 1935, with regard to Japanese expenditure on harbour works in the Pellew islands, and at Saipan and Rota in the Marshall group, and later American opinion was much disturbed by the construction of aerodromes on the Caroline and Marshall groups, which though ostensibly for civil purposes might be used as air bases in the event of war.

¹ Siam abstained from voting.

*Japan and
Naval
equality*

Her retirement from the League was also followed, in 1934, after some ineffective naval conversations between the great naval Powers, by a denunciation of the Five Power Naval Treaty, to become effective on December 31st, 1936. Japan demanded, on the score of national prestige, naval equality in "global tonnage" with the United States and the British Empire. This denunciation implied, of course, that Article 19, with regard to the *status quo* area, would also probably cease to be effective after the same date.

*A Japanese
Monroe
Doctrine*

About the same time some colour was lent to the view that Japan had ambitions to establish a Monroe Doctrine over Eastern Asia, by an official statement warning Foreign Powers against giving financial or technical assistance to China. This statement, however, elicited unfavourable comments from the American and British Governments, and was followed by explanations intended to be reassuring.

THE PRESENT JAPANESE SITUATION

But the process of expansion continued. During 1935 and 1936 it was evident that an attempt was being made to detach from China the five north-eastern Chinese provinces, Hopei, Chahar, Sinyuan, Shansi and Shantung, and set up there an autonomous regime, presumably under Japanese protection. Further, troops of the Kwangtung Army, from Manchukuo, occupied most of the important points in Inner Mongolia, thus isolating Outer Mongolia, which is under Russian influence, from direct communication with China.

The objects of this further advance are not difficult to find. They are (1) to isolate China from Russia and thereby prevent the spread of Communism towards China and Japan, (2) to obtain virtual control of the iron ore of Shantung, the coal of Hopei (with a view partly to the production of oil from coal) and the cotton growing areas of northern China, (3) to establish a barrier against Russian interference with Japanese aims in China. Of these the economic and strategic reasons are the most important. A Japanese Empire, independent of resources of food, coal, iron, timber and petroleum from foreign sources, which might be shut off, would be, by its isolation and strength, difficult to attack and more difficult to defeat. Manchuria and northern China would

provide all of these except petroleum and that deficiency could be overcome partly by constructing plant for the production of oil from coal and partly by maintaining large reserves. Hence all oil companies, local or foreign, in Manchukuo and Japan are now compelled to keep a reserve equivalent to their normal six months' needs.

Meanwhile the U.S.S.R. has not remained idle. Realizing that the Japanese conquest of Manchukuo had made the Chinese eastern railway strategically valueless to Russia, it sold its financial interest for a comparatively small sum to Manchukuo, and proceeded to construct a second branch of the Trans-Siberian railway, from Lake Baikal and north of the Amur line so as to have two alternative lines of communication to the Pacific Ocean. The other sections of the Trans-Siberian line were doubled, Khabarovsk was transformed into a great military station and the headquarters of an Eastern Army and Air Force. Munition bases were established in Eastern Siberia and reservists were given farms there to make this army as independent as possible of the long line of communication to the industrial centres and depots of European Russia. An air force of some 500 machines was stationed in the region between Khabarovsk and Vladivostok, and within air range of some of the Japanese ports and centres of population and industry.

Thus, Japanese expansion has not merely saddled her with great continental obligations which may prove increasingly onerous; it has also led to counter measures on the part of Russia. Further, time may show that the actions of Japan were the necessary stimulant to produce a united China. Whether the Japanese people, industrious, patriotic and capable but poor, will be able financially to undertake the constant and perhaps increasing burden which may result from the present policy of expansion is, therefore, a matter of some doubt.

BRITISH RESPONSIBILITIES IN THE WESTERN PACIFIC TO-DAY

The chief focal areas of British sea trade in the Pacific are : (a) the terminal area round the Chinese ports, from Tientsin in the north to Hong-Kong in the south; (b) the Straits of Malacca through which passes most of the British traffic to

and from (a); (c) the terminal areas round the ports of Australia, New Zealand and British Columbia. Outside these regions our shipping, serving the different island groups and connecting Canada, the Panama Canal and Cape Horn with Australia and New Zealand is dispersed over the immense area of an ocean which occupies two-fifths of the surface of the globe. Our primary responsibilities of defence are those which centre round the focal areas, and hence it is at these parts of the ocean are situated such naval bases and concentrations of military force as we possess in the Pacific region.

(a) *British
Interests in
China*

British territorial interests in China consist of Hong-Kong with Kowloon and the New Territory, concessions at Canton (Shameen), Chinkiang, and Tientsin, and our major share in the International Settlement of Shanghai. These, however, only represent a part of our total responsibilities and interests in this region. British capital, to the estimated amount of several hundred millions, is invested in undertakings and public utility works, such as railways, ports and mines elsewhere.

Most of our trade makes use of three important routes, viz., (1) the trade of the southern provinces follows the river route to Canton and thence to the port of Hong-Kong; (2) the trade of the Yangtse Kiang Valley and its tributaries converges at Hankow and goes by river to Shanghai near its mouth; (3) the trade of the northern provinces converges on the Peking¹ to Tientsin railway. British policy, which is chiefly concerned with the establishment and maintenance of peaceful conditions in China and a normal flow of trade, is particularly concerned therefore with the security of the trade exits at Hong-Kong, Shanghai, Taku and Chinwangtao. Hence, the most important British naval and military responsibilities centre round Hong-Kong, Shanghai and Tientsin.

The British garrisons stationed at these places are:—

Hong-Kong.—2 Heavy Batteries and 2 A.A. Btys. R.A.;
2 Mtn. Bty, 2 Heavy Btys, Hong-Kong—Singapore Brigade;
2 Fortress Coys., R.E.; 3 British Battalions; 1 Indian
Battalion.

Shanghai.—1 British Battalion.²

Tientsin.—1 British Battalion.

¹ Now called Peiping ² Now (August, 1937) raised to four battalions.

In addition to the military garrison there is the China Squadron based on Hong-Kong (see page 100) with its attached air arm and there is a R.A.F. base at Kai Tak.

The naval base of Hong-Kong, the headquarters of the *Hong-Kong* China station, is not merely our most important territorial and trade interest in China but is the key to all our other interests, which are essentially maritime. It is an island, eleven miles long and from two to five miles broad, at the mouth of the Canton river. The Colony includes Kowloon, on the mainland, and beyond Kowloon, an area known as the New Territory, which was leased from China for 99 years in 1898.

The island of Hong-Kong is close to the mainland; the entrances to the harbour, which is one of the finest in the world, are narrow and easily defended from sea attack; and the land frontier of the New Territory was selected in order to minimize the danger of attack from the land side. As a naval base for major operations, its value is diminished by the comparative proximity of first-class Japanese bases about 1,200 miles away and of second-class Japanese bases in Formosa and the Pescadores only 500 miles away; and by the fact also that its communications with Singapore, 1,450 miles to the south, run through a region where Japanese naval power might be expected to predominate.

The dock accommodation in the island and in Kowloon (the Whampoa Docks), is good though not suitable for Post-Jutland capital ships. There is cable communication with Singapore, and a wireless telegraph service which can communicate direct with that port also. It is an admirable centre for the normal naval activities, which in that part of the world constantly approach active service conditions, *e.g.*, gunboat patrols on the 1,400 miles navigable stretches of the Yangtse Kiang; protection of shipping against Chinese pirates, etc.

Two factors, which detract from its usefulness, however, require mention. Its hot weather climate is trying and internal security problems might arise from the fact that of its total population of 840,000, 820,000 are Chinese.

As regards external attack, it lies at the very end of our lines of communication, comparatively close to Japanese bases or potential bases and remote from other British bases. It

might, therefore, be subjected to any of the following, either singly or in combination: (1) Air attack on the harbour by aircraft from carriers or from Formosa, 500 miles away; (2) Naval operations against its lines of communication with Singapore; (3) attack on the land side preceded by a landing at some convenient bay in Chinese territory nearby. To withstand the first, very strong anti-aircraft defences would be required; the issue of the second and third would depend on various factors such as the attitude of China and its power to resist, the speed with which the Grand Fleet could reach Singapore and operate in the Western Pacific, and the issue of the naval operations there.

Wei-hai-wei The climatic difficulties of Hong-Kong were overcome to some extent by an agreement with China with regard to Wei-hai-wei. This territory, which consists of the island of Liu-Kungtao, together with some ground on the mainland of the Shantung peninsula, was leased from China, in 1898, when Port Arthur was acquired by Russia, in order to have a naval base to protect our interests in northern China. The defeat of Russia by Japan, the subsequent expansion of Japanese naval power, and the Anglo-Japanese Alliance rendered it both unnecessary and unsuitable as a naval base, and for some years it has been used, on account of its excellent climate, merely as a hot-weather station for the China squadron.

At the Washington Conference in 1921-1922 Great Britain agreed to return it to China, provided Japan abandoned Tsingtao, and subject to a proviso that the British navy might use the anchorage if it is not required by the Chinese Navy. This agreement was subsequently confirmed by the Treaty of Nanking (1930), and Wei-hai-wei has now been evacuated. The island of Liu-Kungtao is, however, available for use by British naval units for ten years, unless China desires to place a naval base there.

Shanghai Shanghai, the greatest port and industrial centre in China is situated near the mouth of the Yangtse Kiang, the most important channel of trade. It consists of the International Settlement, the French Concession and the Chinese city. The area of the International Settlement, in which British interests are mainly concentrated and where they take a foremost place, is about nine square miles; it contains about

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8,500 British residents, about 28,000 other foreigners and 1 million Chinese. The total population of the whole of Greater Shanghai is approximately 3 millions. The security of this great and wealthy area, situated on the edge of a disordered China, and the maintenance of law and order in it, are responsibilities not merely of Great Britain but also of the other Powers with interests there. British interests are, however, specially great, particularly as regards banking and shipping, and British responsibilities in regard to defence are consequently the most important.¹

In theory, the International Settlement is Chinese soil; in practice, it is governed by a Municipal Council, elected to represent the various interests with the British element in the majority, and in no way subordinate to the Chinese Government. Further, by usage, it has established the right to defend itself, to declare its area neutral ground in all Chinese struggles and to exclude Chinese armed forces. Great Britain maintains there a garrison of 1 Battalion; the United States, France and Japan also keep small detachments. In addition to these, there is the Shanghai Volunteer Corps, maintained at the expense of the ratepayers, which is a mixed force with a total strength of about 1,700.

The problems associated with the defence of Australian and New Zealand routes will be surveyed in later chapters, *The Australian and New Zealand areas*
The chief focal area of sea trade in Australian waters is round the south-east and southern coasts, and the naval bases and defended ports are placed accordingly: viz., the naval base of the Royal Australian Navy at Garden and Cockatoo Islands near Sydney, and defended ports at Brisbane, Hobart, Melbourne, Adelaide and Albany. The naval base of the New Zealand Division is at Devonport near Auckland.

Esquimalt, two miles west of Victoria, at the southern end of Vancouver Island, lies at the entrance to the Juan de Fuca Straits, by which all sea traffic passes to and from Vancouver. The harbour is good but dock accommodation is limited. It is garrisoned, like Halifax, by the Canadian *The Canadian Area*

¹ An authoritative estimate for 1930 showed British, Japanese and American investments in Shanghai to be:

Britain	£151 millions
Japan	£44 "
U S A.	£26 "

Permanent Active Militia. Its great distance from the focal areas of the Western Pacific, *e.g.*, 4,100 miles from Yokohama, 6,000 miles from Hong-Kong, 7,000 miles from Sydney, confines its importance in war chiefly to the defence of the local area round the terminal ports of British Columbia.

*The Straits of
Malacca and
the Singapore
base*

Following the Washington Conference, the situation which had arisen, owing to Hong-Kong being placed in the *status quo* area, was a subject of much discussion both in Great Britain and the Dominions. Particularly in Australia and New Zealand, opinion was insistent that a naval base should be constructed in the Far East capable of taking the largest battleships. Failing the construction of such a base, British Naval power could not be concentrated near this region in case of need. The Imperial Conference of 1923 drew attention to "the deep interest of the Commonwealth of Australia, the Dominion of New Zealand and India, in the provision of a naval base at Singapore, as essential for ensuring the mobility necessary to provide for the security of the territories and trade of the Empire in Eastern waters." Accordingly, preliminary work on the Singapore base was started in 1925; a floating dock was brought out from England, and possible sites for a hill station were selected. In 1929, however, the work on the base was suspended by the British government.

The Imperial Conference of 1930 referred to the matter in a resolution which stated that the policy of the ultimate establishment of a naval base at Singapore should be maintained. The Air Base there should, it considered, be completed and the work on the docks should be resumed. It recommended, however, that the completion of the equipment of the docks and of the defence works should be postponed for five years, when the matter should be reviewed again. The British Government accepted the principle of this resolution, and work on the docks was immediately resumed.

The construction of this base may be regarded merely as a matter of Imperial insurance. It is two thousand miles from the main bases of Japan; or nearly as far as Great Britain is from Canada. It is nothing more than a means by which, in the last resort, Britain could utilize part of her naval strength to protect the British and Dominion interests in

the south-west quadrant of the Pacific. In essence it is defensive and not offensive. The preservation of the integrity of British territory and the security of British trade are the sole objects which it is designed to serve.

The island of Singapore, which is about the same size as the *Malaya* Isle of Wight, lies off the end of the Malay Peninsula, from which it is separated by a strait about one mile in width. Across this strait stretches a causeway which carries a road, a double line of railway and also a pipe line bringing a water supply from the State of Johore. To the south of the island is Singapore Strait, part of the most important route from the Western Pacific to the Indian Ocean; to the north-east lies a southerly extension of the Malay Peninsula. A study of a map of the region will show that the defence of the island, and of its naval and air bases, must be largely concerned with the adjoining mainland and with the attitude of Holland, whose possessions flank the route from the Pacific to Singapore.

Politically, the region of the Malay Peninsula which is under British control falls into three divisions: (1) The Straits Settlements, a Crown Colony with its headquarters at Singapore, and comprising Singapore, Labuan, Penang, the Province of Wellesley and Malacca. (2) The Federated Malay States of Perak, Selangor, Negri Sembilan and Pahang and (3) The Unfederated States of Johore, Kedah, Kelantan, Perlis and Trengganu, which are British Protected States. Of these last, Johore, in size, population, resources and proximity to Singapore is the most important. By Treaty, its Sultan is bound to accept and act on the advice of a British resident. Its population of about half a million includes 215,000 Chinese and 50,000 Indians, in addition to 235,000 Malays. Besides these, many of the rubber plantations are staffed by Japanese; Japanese traders are numerous; and a large part of the local fishing industry is in the hands of Japanese fishermen. Like the remainder of the Malay Peninsula it is densely wooded and rugged country, gradually becoming altered by the development of rubber plantations. A successful occupation of it by a hostile Power would render the naval and air base useless.

A landing in force on it, however, in the face of air attack, would be extremely hazardous. There are no harbours; the

coast is mainly mangrove swamp ; the weather conditions during the Monsoons are treacherous.

*The Isthmus
of Kra*

North of the Malay States lies that part of the peninsula which is narrowest and which is part of the territory of Siam, though regarded as a British sphere of influence. At its narrowest part the isthmus is only 25 miles wide, and, at Kra, a route not more than 40 miles long, could be traced which is less than 100 feet above sea level. A canal constructed here would shorten the journey from Hong-Kong to Calcutta by 600 miles, and from Bangkok to Rangoon by 1,200 miles. Were such a canal to be under the control of a foreign naval Power, the strategic value of Singapore would be greatly decreased.

*The
Garrison of
Singapore*

The present garrison of Singapore consists of 1 Heavy Brigade, 1 A.A. Brigade, 1 Heavy Battery, Hong-Kong-Singapore Brigade, 3 Fortress Coys. R.E. and 2 British Battalions. There is one Burma battalion at Taiping in the Malay States, about 500 miles to the north. The air garrison consists of 4 Squadrons R.A.F. There are also the Straits Settlements and Federated Malay Volunteer Forces, both land and air, which comprise units of various nationalities with a large British element, and the Malay Regiment (H.Q., Port Dickson) administered by the Colonial Office. The total strength of all these, apart from the British garrison at Singapore, is about 6,000.

UNITED STATES INTERESTS IN THE PACIFIC TO-DAY

The chief defence responsibilities of the United States in the Pacific are: (a) the defence of the Home Territory ; (b) the defence of the Panama Canal which is the naval and chief mercantile link between the east and west coasts ; (c) the defence of trade interests in the Far East ; (d) the defence of outlying territories, the greatest of which is the Philippine Islands. To defend these various interests, the United States can now quickly concentrate her whole naval power in the Pacific by means of the Panama Canal, and have therein a superiority as against Japan in all categories of naval vessels except submarines. Her bases on the continent are at San Diego, and Mare Island, California, and Puget Sound, Washington ; at the Panama Canal, Balboa ; and 2,000 miles south-west of San Francisco, as an outpost both of the American

coastline and the Panama Canal, Pearl Harbour, in Oahu in the Hawaiian group. In addition to these, she has naval stations at Tutuila (Samoa), the island of Guam, and Cavite in the Philippine Islands ; and potential naval harbours at Wake Island, and at Dutch Harbour in Unalaska. With the termination of the Washington *status quo* area she may proceed with the construction of a naval and air base in the latter.

Pearl Harbour, Oahu, in the Hawaiian group occupies a position of great strategic importance. It is a first-class American base in the only important island group within 2,000 miles of the American coastline. Routes from Asia to the American coast are so long as to be beyond the cruising radius of any but larger ships, except for the Power which owns this group of islands. They flank every approach from Japan to American territory ; they are the first link in the chain of communications between the United States and her chief colonial possession the Philippine Islands. About 11 million tons of shipping enter the ports of this group annually.

Oahu is nearer to the United States (2,000 miles) than to the coasts of any other Power and hence can be more easily reinforced from the American side : it is fitted, by its natural strength, for a fortress. Its fine harbour has been deepened and widened ; it is a cable station on the American owned Pacific cable, and possesses a powerful wireless installation which can communicate directly with America and Japan. The fortifications, covering the harbour and Honolulu, seven miles away, are of the most modern description.

The only weakness is the possibility of internal security troubles in time of war, owing to the large proportion of Chinese and Japanese in the total population, of which they form 45 per cent.

Guam, 3,000 miles, west by south, from Pearl Harbour, and 1,500 miles from Manila, is the second link in the American line of communication to the Philippines. It is a naval station with a garrison of marines and a shore naval force, and is closed to foreign vessels of commerce, except in special cases. Its port, Piti, does not possess dock accommodation and the island is not fortified. As it lay within the *status quo* area, it could not previously be developed as a naval base.

*The Philip-
pines*

The Philippine Islands, the greatest colonial possession and strategic liability of the United States, are almost four times as far from the American coast as they are from Japan. From Manila to Yokohama is only 1,700 miles: to San Francisco, it is 6,200 miles. Further, the route connecting Manila and Cavite with Guam is closely flanked by Japanese islands, formerly mandates.

By the terms of the Philippine Commonwealth and Independence Law, these islands were given Dominion status by the United States in 1935, and in 1945 will become independent. It is at present doubtful whether the United States will retain naval bases there after that date, as there is a strong feeling in favour of reducing strategic responsibilities in the Pacific.

If the United States removes all its forces there is the danger that the Philippines, with their great mineral and agricultural resources, may prove a powerful bait to Japan, particularly as there are already many Japanese settlers there. From the nearest Philippine island to British North Borneo is only 11 miles.

Pago-Pago

Pago-Pago, the fiord-like harbour of Tutuila, in American Samoa, is a United States naval station, but has no military garrison and is not fortified, as it was in the former *status quo* area.

*Balboa and
Coco Solo*

Balboa, the American naval base at the Pacific entrance of the Panama Canal, is extremely remote from the naval bases of any other great Power in the Pacific, the nearest of which is 7,000 miles away. Nor is there any group of islands, except the Galapagos group, which belongs to Ecuador, within 2,000 miles of this base. Further, the most direct line of communication from Japan is a great circle route which follows closely the arch of land round the northern Pacific, and which is flanked by American bases at Seattle (Puget Sound), Mare Island, California, and San Diego, California, and also by Pearl Harbour, Oahu. At Coco Solo, near Colon in the Panama Canal zone, there is a Fleet Air Base of the American Navy.

NAVAL DISARMAMENT AND REARMAMENT

In concluding this section on sea routes, it is desirable to summarize the situation with regard to naval limitation.

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The Five Power Naval Treaty, signed at the Washington Conference in 1921, and ratified on August 17th, 1923, embodied agreements whereby the British Empire and the United States were allotted 525,000 capital ship replacement tonnage, Japan, 315,000 tons and France and Italy 175,000 tons each. No capital ship was to exceed 35,000 tons or carry guns of more than 16-inch calibre. The figures for aircraft carriers for these same Powers were not to exceed 135,000 for the United States and the British Empire, 81,000 for Japan and 60,000 for France and Italy. No cruiser was to exceed 10,000 tons or carry guns of more than 8-inch calibre. No merchant vessels were to be prepared for armament, other than by a strengthening of the decks to carry 6-inch guns. This treaty could be terminated by December 31st, 1936, if notice to that effect were given by one of the signatory powers, and in that case a new Conference would be held to try to reach some new agreement.

In 1930 an attempt was made to reach some similar arrangement on the matter of cruisers, destroyers and submarines at a Conference held in London. *The Londo Naval Treaty* (1931)

This did not succeed however in producing an agreement between France and Italy on questions of their relative naval strength. Accordingly the Treaty, which contained the results of the Conference, fell into two sections. One section was signed by the United States, the British Empire, France, Italy and Japan; the other section was signed only by the United States, the British Empire and Japan.

In the first section, all five Powers agreed not to exercise their rights under the Washington Treaty to replace any capital ships before the end of 1936, viz., they agreed to observe a naval holiday as regards capital ship replacement until then. There was some rearrangement of aircraft carrier tonnage; submarines were, with certain specified exceptions, not to exceed 2,000 tons. And finally, the Five Powers reasserted and clearly defined their attitude towards the use of submarines as commerce destroyers. Submarines must, it was affirmed, adhere to the rules of international law, and must not "sink or render incapable of navigation a merchant vessel, without having first placed passengers, crew and ship's papers in a place of safety." A definition of what is meant by "a place

of safety" follows. "Ships' boats are not to be regarded as a place of safety, unless the safety of the passengers and crew is assured, in the existing sea and weather conditions, by the proximity of land, or the presence of another vessel which is in a position to take them on board."

The other section of the Treaty, which was signed only by the British Empire, the United States and Japan, dealt with cruisers, destroyers and submarines, providing for an approximate equality between the United States and Great Britain and a margin of about 30 per cent. except in submarines over Japan.

Finally, as neither France nor Italy had agreed to limit the number of their cruisers, destroyers or submarines, a safeguarding or "Escalator" clause was inserted, which authorized further shipbuilding by any of the three Powers should the building programme of any other Power appear to threaten their national security.

This London Naval Treaty of 1930 was to terminate on December 31st, 1936.

*The Anglo-German
Agreement
(1935)*

In June, 1935, an agreement was concluded with the German Government whereby the total strength of the German navy was fixed at 35 per cent. of the naval strength of the British Empire. This Anglo-German Naval agreement, though regarded by France as a recognition by Great Britain of the rearmament which Germany was carrying out contrary to the Treaty of Versailles, was of definite value. It set an upper limit to German naval armament, and ensured to Great Britain a small margin of superiority in the Home Waters

*The London
Naval Treaty
(1936)*

As was anticipated, the Naval Conference held in London (1935-6), as a result of Japan's denunciation of the Washington Five-Power Naval Treaty, was largely unsuccessful in preventing any measure of disarmament. Japan insisted on "a common upper limit" with U.S.A. and the British Empire on the grounds of national prestige and large export trade, and when these two countries demurred because it would mean a two-power standard and complete freedom of action for Japan in the Western Pacific, withdrew from the Conference. Italy refused to take part as she was at war and sanctions were being imposed on her. Even technical and qualitative disarmament was difficult. The United States

stood firmly by the 35,000 ton capital ship as the only suitable vessel capable of long-distance operations and of withstanding air attack, though every other Power wished a reduction in size. Great Britain's desire for the abolition, or at least reduction in size, of the submarine met with no response anywhere.

The results of the Conference were therefore somewhat meagre. They were embodied in a *Treaty of London* signed only by the British Empire, the United States and France, the substance of which was as follows :—

- (1) Maximum size of capital ships 35,000 tons, minimum size 17,500 tons, guns to be not more than 14-inch (instead of 16-inch).
- (2) Maximum size of aircraft carriers 23,000 tons, guns 6 1 inch
- (3) The building of 10,000 ton cruisers (Class A cruisers) to be suspended during the period of the Treaty.
- (4) No cruisers bigger than 8,000-ton cruisers with 6 1-inch guns to be built during the duration of the Treaty.
- (5) Flotilla leaders, destroyers, sloops, etc, limited to 3,000 tons and 6 1-inch guns
- (6) Maximum size of submarines to be 2,000 tons with 6 1-inch guns
- (7) The signatory powers to communicate with each other during the first four months of each year their annual building programmes so that none shall take the others by surprise
- (8) The treaty to come into force on January 1st, 1937, for 6 years
- (9) A protocol was added re-affirming the " humane clause " (v page 166) in the London Treaty of 1930
- (10) Clauses to enable signatory powers to meet the case of non-signatory powers refusing to abide by the limitations

Letters were exchanged between the British and American delegations reaffirming the principle of parity between the two countries.

The general situation, therefore, from the beginning of 1937, has been that there is no restriction on the size of navies, except that (a) the British and American governments will continue to observe a general policy of parity ;¹ (b) the German navy is restricted to 35 per cent. of the British naval strength. The *status quo* area in the Pacific, which was established by the Washington Five Power Naval Treaty, disappeared with that Treaty, and the Five Powers may proceed to construct or develop naval bases on islands in the Pacific. Already it seems probable that Japan is developing her naval bases in Formosa, which was previously in the *status quo* area, and that the United States will proceed with plans

The American Government has not objected to the recent British programme of expansion, even though when completed it would not preserve strict parity. Nor would Britain criticize American expansion.

to establish a base at Dutch Harbour. Hong-Kong is now released from the limitations imposed upon it, but its proximity to Japanese bases make any development of it into a fleet base extremely improbable. Its defences and facilities are, however, being put on a proper footing. Great Britain is released from quantitative limitations and is at liberty to build to her requirements of cruisers and other vessels. But so also are other nations. Some financial saving has been achieved in the holiday in Class "A" cruisers until 1943.

But it is too early yet to say whether the new Treaty will come fully into force. It seems certain that Germany, Italy and Russia will carry out its provisions, but, at the time of writing, the attitude of Japan is doubtful;¹ and obviously, if any one great naval power refuses to abide by the limitations, it cannot come fully into operation.

A SUMMARY OF THE PRESENT SITUATION

It will be evident from the foregoing pages that the pre-war British policy of maintaining a Two-Power naval standard has disappeared under the pressure of circumstances. The principle of equality with the United States has been accepted, because war with that country is regarded as inconceivable. As regards other Powers the British Navy is still numerically (except in submarines) equal to any two, but qualitatively this may not be the case, as many of the British vessels are, at present, older than and inferior in speed, to corresponding vessels in foreign navies. Thus, though the Anglo-German Naval Agreement should theoretically give a superiority to Great Britain in the Home Waters of at least 50 to 35 as compared with Germany, the German vessels will in the next few years be all new and will embody the results of post-war experiment and experience particularly, in regard to anti-aircraft devices. This disadvantage will, however, disappear as the process of modernization in the British Navy, which has now begun, proceeds.

From a regional standpoint it may be assumed that Great Britain, on figures of naval strength and on geographical position is still superior in the Eastern Atlantic, and the United States is supreme in the Western Atlantic and Eastern

¹ Japan refuses to limit the armament of her new capital ships, if built, to 14 inches calibre.

Pacific. As regards the Mediterranean, the position must depend on the balance of naval and air power combined, and particularly on the security of our naval bases there. In the Indian Ocean, Great Britain is, at present, the only Power with naval bases or important naval forces in that area, but the development of Italian military and air power round the north-west entrance to that ocean must obviously affect the situation. In the Western Pacific, north of the Dutch East Indies, Japan is supreme owing to its geographical position and the impossibility of either Britain or the United States exercising anything like their full strength there ; the position in the south-west quadrant of the Pacific must depend on whether the situation at the time in Europe is such as to permit Great Britain to send eastwards to Singapore a substantial part of its fleet. This element of doubt has led to a greatly increased interest in local defence, as contrasted with Imperial defence, in the British countries which adjoin that region. The uncertainty and anxiety have also led to increases in Dutch and French forces and armaments in the Far East. Thus, France, which normally keeps in Indo-China a force of 25,000, is said to be establishing a new naval and air base at Kamranh Bay, almost halfway between Singapore and Hong-Kong and on the British air route to Hong-Kong.

NOTE ON DISTANCES FROM SINGAPORE

The following distances (nautical miles) from Singapore are given for reference

Colombo	1,600	Sarawak	530	Pt. Darwin	1,900
Madras	1,600	Manila	1,350	Thursday Is	2,500
Bombay	2,500	Hong-Kong	1,450	Fremantle	2,300
Aden	3,700	Shanghai	2,200	Sydney	3,300
Port Said	5,100	Yokohama	2,900	Auckland	3,800
Malta	6,000	Honolulu	5,900	Mauritius	3,000
Southampton		Vancouver	7,000	Durban	4,500
(via Suez)	8,000	Panama	10,500	Capetown	5,000
Halifax N S	10,000			Southampton (via Cape)	11,000

CHAPTER XI

THE AIR ROUTES OF THE BRITISH EMPIRE

Value of Air Communications

To a widely-dispersed Empire the development of air communications is of special importance. The speedy transport of passengers and mails, provided safety and reliability are also ensured, must be of great social and economic value. Politically, it helps to neutralize the effects of distance and gives more opportunity for the personal consultation which is necessary if full co-operation between the various parts is to be achieved. Strategically, our air strength in war depends in no small degree on the progress of civil aviation within the Empire. By means of it there is built up a reserve of pilots, mechanics and groundsmen, a chain of potential air bases with their equipment of radio facilities and ground lights, a flourishing aircraft industry, all of which would be a valuable aid to expansion in time of war or threat of war.

Development of Air Routes

The first important step taken by Great Britain towards the organization and development of civil aviation was the appointment in 1917 of a Civil Aerial Transport Committee. This Committee urged the establishment of air routes within the Empire, and emphasized that the connection between civil and military aviation should be such that the civil side would be a satisfactory basis for military expansion in time of necessity. They recommended, therefore, that civil aircraft should be made to conform to certain government requirements even at the cost of a possible diminution of commercial value.

Shortly afterwards the Civil Aviation Department, formed in 1918 as a branch of the Air Ministry, was made responsible for all matters dealing with civil lines of communication by air, and with it was linked up the Meteorological Office. Subsidies were to be paid by the Government to a number of air lines operating from Great Britain to the continent. Subsequently, at the Imperial Conference in 1921, the question of air communications between the Dominions and Great Britain was

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raised, and a suggestion made that airships constructed for the British Government should be tried on Imperial routes, but owing to financial stringency the matter was deferred for the time being.

A further important step was taken in 1922, when, in view of the fact that the companies which had been subsidized by the Civil Aviation Department were not prospering, the Hambling Committee was appointed, which recommended the formation of a company, with a capital of one million pounds, on the board of which should be two Government directors, to embrace, if possible, all air lines operating from Great Britain. The Government agreed to pay an annual subsidy to this company, and, in return, its machines were to be at the disposal of Great Britain in time of war.

In 1923, this recommendation was carried out, and a *Imperial Airways, Ltd.* new Company was formed, known as Imperial Airways, Ltd., which combined the interests of the Handley Page Co., the Instone Line, the Daimler Hire Co., and the *British Airways* Marine Air Navigation Company.

This Company now operates the Imperial air routes to India, Australia and the Cape, and also the following European routes :

London-Paris, 225 miles.—Operated three times daily during the summer and twice daily during the winter.

London-Paris-Basle-Zurich, 535 miles.—Daily during the summer only.

London-Brussels-Cologne, 320 miles.—Daily.¹

In addition to these, it also operates the Imperial Air Routes to India, to Australia and to the Cape, described in the following section.

In 1936, another company, British Airways, also received a subsidy from the Government, and from its airport at Gatwick maintains a daily service to Stockholm.

THE IMPERIAL AIR ROUTES.

At present, a twice weekly service to India (leaving London *To India and* on Wednesdays and Saturdays), with a weekly extension to *Australia* Australia is maintained, the route and distances from London being as follows :—

¹ Recently an offshoot extended—Brussels, Frankfurt, Budapest.

Croydon ; Paris (205) ; Brindisi (1,352) ; Athens (1,721) ; Alexandria (2,308) ; Gaza (2,584) ; Rutbah Wells (2,947) ; Baghdad (3,187) ; Basra (3,465) ; Kuwait (3,540) ; Bahrain (3,805) ; Sharjah (4,140) ; Gwadar (4,580) ; Karachi (4,880) ; Jodhpur (5,264) ; Delhi (5,566) ; Cawnpore (5,809) ; Allahabad (5,919) ; Calcutta (6,386) ; Akyab (6,734) ; Rangoon (7,041) ; Bangkok (7,405) ; Alor Star (7,960) ; Singapore (8,393) ; Palembang, D.E.I. (8,695) ; Batavia (8,983) ; Semarang (9,233) ; Sourabaya (9,390) ; Rambang (9,676) ; Koepang (10,214) ; Darwin (10,726) ; Longreach (12,049) ; Charleville (12,316) ; Brisbane (12,754).

The service between Karachi and Singapore is operated by Imperial Airways in conjunction with an associated company, Indian Trans-Continental Airways, and that between Singapore and Brisbane by Qantas Empire Airways (Queensland and Northern Territory Aerial Services), a company in association with Imperial Airways. In India, several internal air services are maintained in conjunction with the above, *e.g.*, Karachi to Lahore and to Bombay and Madras, by Indian National Airways which, together with the Government of India and Imperial Airways, owns the shares in Indian Trans-Continental Airways. The service from Calcutta to Brisbane is at present only a weekly one, and connects at Penang with a weekly service to Hong-Kong (1½ days).

No useful purpose would be served by giving the exact timings on the route, as they are gradually being modified by a process of speeding up, and can be found accurately set forth at any time in the official time-tables of Imperial Airways. The following were, however, the approximate times and saving in the case of important places, in January 1937.

<i>London to :</i>	<i>Time by Air</i>	<i>Saving over other methods</i>
Alexandria	2½ days	2½ days
Baghdad	3½ "	5¼
Karachi	5 "	11
Delhi	6 "	11
Calcutta	6¾	12
Rangoon	7	13
Singapore		14
Brisbane	12	18

*Future
Developments
on Eastern
Route*

The British government announced in 1935 that an increase in the number of services on this route and a general speeding up would shortly take place. By the use of flying boats and faster aeroplanes, the introduction of some measure

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of night flying and the lengthening of a few of the sections, a 2½ day schedule to India and a 6 to 7 day schedule to Australia, with a frequency of five services weekly to India, three to Malaya and two to Australia will, it is expected, be achieved. Already (in January 1937) some of the new Empire flying boats were in commission and on the outward journey to the East a modification in the route has taken place. Eastbound passengers fly *via* Paris to Marseilles, Bracciano (near Rome) to Brindisi, and thence follow the ordinary route *via* Athens and Mirabella (Crete) to Alexandria.

The air service to the Cape is operated independently of the Eastern service. It leaves London on Tuesdays and Fridays, and proceeds by the same route as far as Alexandria, whence it runs as follows :—

Wadi Halfa (3,017 from London) ; Khartum (3,517) ; Juba (4,276) ; Entebbe (4,611) ; Nairobi (4,945) ; Dodoma (5,317) ; Mbeya (5,603) ; Broken Hill (6,116) ; Salisbury (6,416) ; Bulawayo (6,642) ; Johannesburg (7,094). From Johannesburg the service *via* Kimberley to Capetown (7,904) is a weekly one. A call is made, if necessary, at Assiut, Luxor, Shereik, Kosti, Malakal, Kisumu, Arusha, Moshi, Mpika, Pietersburg, Victoria West. From Khartum there is a weekly service to Kano in Nigeria which will later be extended to Lagos, Accra, Freetown (time from London to Kano, 5 days). At Nairobi, there is a connection by the Wilson Airways to Mombasa, Tanga, Zanzibar and Dar-es-Salaam, and in Northern and Southern Rhodesia, by the Rhodesia and Nyasaland Airways, to various places, including Livingstone and Blantyre.

The Cape route is subsidized by the Sudan, Uganda, Kenya, Tanganyika, Northern and Southern Rhodesia and the Union of South Africa, as well as by Great Britain, and the approximate times and saving are as follows :—

<i>London to :</i>	<i>Time by Air</i>	<i>Saving.</i>
Khartum	4 days	4 days
Nairobi	5½ "	13½ "
Broken Hill	6½ "	13½ "
Cape Town	8½ "	8 "

This route, like the Eastern service, is shortly to be speeded up. A service three times a week, to Kenya and twice a week to South Africa, is under consideration, and it is anticipated

that, by the middle of 1937, mails will be carried regularly to Kenya in 2½–3 days, and to Cape Town in 4½ days.

*Flying
Boats*

Here, too, flying boats, it is expected, will be introduced, the route being up the Nile as at present to Kisumu, thence across land to Mombasa and via Dar-es-Salaam, Mozambique, Beira and Lourenço Marques to Durban. There will also be another service by aeroplane southwards from Kisumu. Already on the Cape route, as on the eastern one, some modifications have been made on the Mediterranean section. Passengers homeward bound to Great Britain fly by flying boat *via* Athens, Brindisi and Bracciano to Marseilles, and Paris.

It now seems certain that the long air routes of the Empire will be flown mainly by flying boats. Their great range (3,500 miles) and considerable seaworthiness make them more suitable than the aeroplane for the purposes of an Empire which is widely dispersed. Even where long flights across land are necessary they can be used provided satisfactory waterways such as rivers or lakes are available. The Nile and the great lakes in Africa, the Ganges in India, can be used for this purpose. Further, if Imperial air routes are eventually to be developed, which will be more independent of air facilities on foreign soil, the flying boat and perhaps the airship seem to be the most likely means. Thus, research, experience and technical improvements may render feasible an all red route by flying boat via Gibraltar, Freetown and Lagos and Walvis Bay to the Cape, or an Eastern service *via* Gibraltar, Malta and Port Said to India. For an oceanic Empire, separated by great sea distances and composed mainly of islands and peninsulas, flying boats are the more natural medium of communication. This does not imply, however, that their use should be universal on all our great air routes. Strong arguments can be adduced for the continued employment of aeroplanes on certain sections where they are required to shorten distances greatly or provide local needs.

In view of this development of flying boat routes, Imperial Airways Ltd., which is building a fleet of them, is using a temporary flying boat base in Southampton Water. Later, when the necessary accommodation has been prepared, the Empire Air Terminus will be at Langstone Harbour near

THE AIR ROUTES OF THE BRITISH EMPIRE 183

Portsmouth, which will be converted into a tideless harbour by the construction of barrages at its entrances.

Until recently, there have been no regular air routes in Great Britain. Distances are short; communications by road and rail are numerous and excellent; the distances from the centres of our great cities to their aerodromes take so long by rail or car that the saving in time on the whole journey is not great; and the climate by reason of winter fogs, low hanging clouds and bad visibility, is not so favourable for flying as that of continental countries. Recent improvements in wireless and meteorological facilities, and the development of "blind flying," have, however, largely removed the dangers of fog, and several regular air services are now in operation. Thus, the railway companies, in association with Imperial Airways, Ltd., have formed Railway Air Services, Ltd., to work in conjunction with the railway time-tables, and other companies have also come into existence. Regular daily services now run from London *via* Birmingham, Liverpool and the Isle of Man to Belfast; from Belfast to Glasgow; and from Liverpool *via* Birmingham and Cardiff to Plymouth. In addition to these, several regular short distance services have sprung up; air taxis are more numerous, and municipalities have awakened to the need for providing air ports.¹

Australia, with its vast distances, regular climatic conditions, and undeveloped internal communications, offers more scope for the development of air routes than any other Dominion, and the mileage of its airways in regular operation is the greatest of any country in the Empire. A line from Adelaide to Perth connects South and West Australia; another from Perth to Daly Waters, 1,500 miles long, provides rapid communication between places on the west coast otherwise joined only by an irregular service of coastal steamers and an air mail route from England to Perth. A line from Sydney, through Brisbane, Charleville, Cloncurry, Camooweal and Daly Waters to Darwin links up the inland terminals of the railways

*The
British
Isles*

*Air Routes
in the
Dominions
1. Australia
and New
Zealand*

¹ The Maybury Committee recommended (1937) that experimental services should be maintained by one company between a central air junction situated in the Liverpool-Manchester area and the following: Belfast, Glasgow, Edinburgh, Newcastle, London, Portsmouth and Bristol. They believed that this would save flying distance, and economize overhead expenses as compared with the present rather haphazard collection of air routes.

from the coast, and overcomes some of the difficulties existing owing to the lack of internal railway facilities. Melbourne and Hobart also are connected by air services. By 1938 an air route will be established between Australia and New Zealand, operated by a company representative of British, Australian and New Zealand interests. This may later be connected up with the American trans-Pacific air service.

¹¹¹ *Canada*

Until recently, no regular air routes were in operation in Canada, though aeroplanes and seaplanes were extensively used for surveying by air photography, for the detection of forest fires and for conveying prospectors and equipment over large tracts of difficult country where any other mode of communication would be arduous and slow. During the last few years, however, several regular services have been started, such as the St. Lawrence route from Anticosti, *via* Seven Islands, to Quebec and Montreal; and a route from Winnipeg to Lethbridge, and from Lethbridge *via* Edmonton to Aklavik near the mouth of the Mackenzie River. Also, a regular trans-continental route from Montreal to Vancouver *via* Winnipeg is to come into operation during 1937. In Canada, indeed, like Australia, the great distances invite the development of air communications, but climate, in Canada, handicaps them more. The Dominion Government erected a mooring mast at St. Hubert near Montreal in preparation for the experimental flights of the R100 and R101, and is maintaining it, in case Imperial airship flights are resumed at some future date.

¹¹¹ *The Union of South Africa*

The Union of South Africa has established aerodromes at all important centres, and subsidizes air mail services from Cape Town to Port Elizabeth and Durban, and from Cape Town to Johannesburg. In South West Africa, South West African Airways Ltd. operates several regular services for passengers, mails and goods, of which the most important is the route from Windhoek to Kimberley, which provides a connection with the Imperial Airways Service to Cape Town.

Airship Routes

The tragic loss of the R101, on her trial flight to India in September 1930, destroyed public confidence, for the time being, in the value British of airships, and the financial crisis intervened to prevent any further expenditure on the sister ship, the R100. The latter was subsequently sold and broken up, and the staff

of the Royal Airship works at Cardington was reduced to a care and maintenance party. In order, however, to provide facilities for foreign airships, and also to admit of a reconsideration of the project in the future, the mooring masts erected at Cardington, Ismailia and Drigh Road (Karachi) are being kept in condition.

It now seems probable that an air service carrying mails, *Trans-Atlantic Air routes* but not passengers, across the Atlantic will shortly be established. In 1936, the way was cleared for this by an agreement between Great Britain, the Irish Free State, Newfoundland and Canada, by which Imperial Airways, in conjunction with Canadian and Irish interests, would share in the enterprise. Two routes will be taken, a northern or summer one *via* Rynanna (R. Shannon), Port Botwood (Newfoundland), Halifax, Baltimore and New York, which would entail a non-stop journey across the sea from Ireland to Newfoundland,¹ of 2,000 miles, and a southern or winter one *via* Lisbon, the Azores, Bermuda and New York. The southern route, though 1,000 miles longer has the advantages of better weather and of shorter jumps across the sea. (From the Azores to Bermuda is 1,600 miles.)

An initial step has been taken by Imperial Airways in developing Bermuda as a flying boat port and in operating, in conjunction with Pan-American Airways, a twice weekly service from Bermuda to New York.

GENERAL ASPECTS OF IMPERIAL AIR ROUTES

Until such time as regular air routes are operated across the North Atlantic, Great Britain is not so favourably situated in relation to the air lines of communication of the world as she is to the seaways. For the latter, her insularity, excellent harbours and central position are advantages which have led to her predominance in maritime trade. For air development, on the other hand, insularity is a handicap rather than an advantage, and the climate of this country is not so favourable as that of continental countries for flying. Further, at present, Britain lies at the end and not in the centre of the great air lines of communication of Europe, Asia and Africa, a fact which handicaps her in making arrangements with foreign countries

¹ Several highly successful flights, in conjunction with American planes, have recently been made in both directions to test this route.

with regard to the establishment of British air routes. Only when regular services from Western Europe to North America, across Great Britain, are established will she obtain the centrality by air which she has by sea; for then her geographical situation will again make her the most important link between the great centres of the old world and the new.

*Dependence
on Foreign
Countries*

The increase in bargaining power ensuing therefrom would be of special importance in view of our dependence on the goodwill of several foreign countries for the passage of our aircraft to the East. Our Imperial air routes to India, Australia and the Cape at present cross France, Italy, Greece and Egypt. The maintenance of these routes therefore depends on troublesome negotiations, with these foreign powers. Many of the countries of the world are parties to the Convention for the Regulation of Aerial Navigation (Paris 1919), which permits to all members freedom of innocent passage over the territory of other members. But some nations, such as the United States, Germany and Switzerland are not parties to this convention; and, further, this right is whittled away in another part of the convention, which states that the establishment of international airways shall be subject to the consent of the States flown over. Thus, in order that Imperial Airways Ltd. might use a route across Italy an Anglo-Italian Convention was necessary, which gave to Italy in return the right to operate services to the United Kingdom, Gibraltar, Malta, Cyprus and Aden. Similarly our route, along the southern coast of the Persian Gulf shown on Map No. 24 has necessitated agreements with the various chiefs of the Trucial coast and with the Sultan of Oman.

THE IMPORTANCE OF THE MIDDLE EAST

At present air centrality, in respect of the Imperial air routes to South Africa and the Far East, is possessed by the region which consists of Egypt, Palestine, Transjordan and Iraq. Alexandria, indeed, is central to the great air ports of Europe, Asia and Africa.

By air, it is within less than one day's journey of Athens, Baghdad and Wadi Halfa; within one day's journey of Khartum, Vienna and Rome; within three day's journey of London, Paris, Moscow and Karachi, and within six days of Cape

Town and Singapore. So important is Egypt relative to our Imperial routes of the present and future that "the security of the communications of the British Empire in Egypt" was one of the four matters absolutely reserved by the British government, "until such time as it may be possible by free discussion and friendly accommodation to conclude agreements in regard thereto," when Egypt was declared an independent State in 1922.

Later, in 1936, when the Anglo-Egyptian Treaty of Alliance terminated the reservations, the treaty specifically gave permission to British aircraft to fly over Egyptian territory and to use Egyptian landing grounds and seaplane anchorages.

Palestine, Transjordan and Iraq possess an importance hardly less than that of Egypt. To their north lies the Anatolian plateau with its great mountain ranges: to the south the second greatest desert in the world. These three countries therefore contain the most practicable corridor by air between the West and East, and Palestine and Iraq are likely to be increasingly important in regard to the air services of the world. To the British Empire, indeed, the security of our routes across these countries is a matter of necessity and is the pivot on which rests the whole structure of air defence in our territories round the Indian Ocean. Hence, in the Treaty of Alliance and Amity (1930), made with Iraq (by which Great Britain agreed to recommend to the League of Nations the termination of the Mandate), Iraq recognized how important were "the permanent maintenance and protection, in all circumstances, of the essential communications of His Britannic Majesty," and agreed to grant for the duration of the Alliance (25 years from 1932) sites for British air bases at or in the vicinity of Basra, and for another British air base west of the Euphrates.

The importance of this Middle Eastern region is still further reflected in the distribution of our Air Force strength throughout the East. The table on page 33 shows that in January 1937 14 out of the 27 squadrons stationed abroad were in Egypt, Palestine and Iraq, the greatest concentration being at present, in Egypt. This distribution is a natural result of geography. "The keynote of British Air policy overseas is flexibility; the power to reinforce

at short notice squadrons normally located in any particular area by others from neighbouring commands, based ultimately on a suitably situated reserve. . . ."¹ Great Britain is not itself well placed as a region where a reserve for the East can satisfactorily be situated. Distance and intervening foreign territory are serious disadvantages which might be fatal where rapidity and unimpeded action are necessary. Egypt, on the other hand is central: its air communications with most of Africa and all parts of the Middle East pass over the territory of no great air power. Hence, "the Trenchard Memorandum of 1919 drew attention to its importance as a *place d'armes* for an air reserve in the Middle East; and the squadrons in Egypt to-day constitute that reserve for operations in Africa, the Middle East or India, in addition to providing the necessary air element for the air defence of the Suez Canal in any war in which it may be threatened." In a wider sense, this reserve is in Egypt, Palestine and Iraq, whose air garrisons are all within ten hours' flight from one another. It is of interest, therefore, to notice that the Anglo-Egyptian Treaty of 1936 provides for the maintenance in the Suez Canal zone of a British air garrison comprising 400 pilots and all the necessary ground and technical staff which such a strength would involve. So also is the decision in 1936 to add twelve squadrons to the strength "at strategic points on lines of communication." It would seem likely that some of these will be placed in the Middle Eastern area.

¹ The Development of the Royal Air Force, by Squadron-Leader V. C. Slessor, M.C. R.U.S.I. Journal, May, 1931.

CHAPTER XII

CABLES AND WIRELESS

THE total length of the submarine cables of the world is about 350,000 miles, of which more than half is owned by British interests. This British predominance is due to many factors. The early realization that our scattered territories required the bond supplied by a rapid interchange of information was a contributory cause ; so also was the understanding that a control of world communications is a powerful economic, political and strategic asset. The central position of Great Britain relative to the land masses of the globe : its situation as the last outpost of Europe in the Atlantic ; the ownership of many island groups in the various oceans and seas ; a control amounting almost to a monopoly of the gutta-percha supplies essential for insulation—these were other factors which contributed to the development of a highly specialized cable industry in this country and to our unique position in relation to submarine communications. Two of the 21 cables which stretch across the North Atlantic are British,¹ as are all but one of those which connect Europe with the east coast of South America. In the Indian Ocean, the whole cable network is British owned, with the exception of a French line joining Mauritius to Madagascar and Mozambique. The cables of the Red Sea are entirely British ; two out of the three which connect the Eastern with the Western Pacific are owned by a British Company.

This predominant position has been of great service to the Empire in times of peace. Within the Empire, it has provided a network of electric nerves radiating from Great Britain, connecting the scattered territories and providing a means for almost simultaneous co-operation. In the world of nations, it has served to make London the hub of communi-

¹ Five of the others are the property of a company registered in England but are under a long lease to the American Western Union Company, which is solely responsible for their operation.

cations. "This spelled financial supremacy; the pound sterling could be quoted against the currencies of the globe in terms of telegraphic transfer. It meant a superior commercial position as time began to press the older leisurely trading enterprise. It brought into being world prices quoted on the basis of market news most adequately serving British mercantile centres—Liverpool wheat, Manchester cotton, London silver prices. It made London the news centre of the earth, for Fleet Street could feel every political wind which blew from day to day."¹

In war, also, it has provided an invaluable means of rapid, secret and reliable communications under British control, and the power of censoring or delaying news to foreign countries. At the same time it has entailed certain responsibilities and is handicapped by certain limitations. Obviously, the security of the cable network depends on maritime supremacy. Once that is lost in any region, the enemy can lift, divert or destroy the cables, just as the British government was able, in 1917, to lift the two ends of a German trans-Atlantic cable, and take them into Penzance and Halifax. Further, even a temporary loss of control in some sea or ocean may seriously affect the security of an important cable. Many cable stations are on isolated island groups which cannot all be defended, and some of these may be attacked by raiding cruisers or other vessels, and put out of operation, as was the Fanning Island station of the Pacific cable in the autumn of 1914.

Also, as will be seen later, important cables sometimes have intermediate land connections which may be open to attack. Our Mediterranean, Red Sea, Indian Ocean system is dependent on connecting telegraph wires which run from Alexandria *via* Cairo to Suez, and from Port Said to Suez. Similarly our western route, by Canada, to the Pacific and thence to Australia and New Zealand, follows the trans-continental railways across Canada, and one of these telegraph links, viz., that which runs beside the Canadian Pacific Railway, crosses the American state of Maine. The destruction of these land lines by enemy action or by sabotage, or loss of control of them, owing to some other cause, in war

¹ *The Background of International Relations*, by Charles Hodges.

would be tantamount to a destruction of a large part of the cable network.

Further, British cables are not necessarily completely under British control. There are many, owned by British companies, which at some point, touch at foreign territory. The operators at such stations will generally be foreign, and censorship and secrecy—and perhaps, even reliability—may be handicapped by this circumstance in time of war. Hence, it is of obvious importance to consider, in particular, the cables which are not merely British owned but which also touch only at British countries, for these are the strategic links that can be adequately controlled and supervised. Such cables are termed in the remainder of this chapter “All Red Cables.”

THE CABLE ROUTES

The principal deep sea cable stations in England are situated at Porcella Cove and Porthcurno (Cornwall), and in the south-west corner of the Irish Free State at Valentia and Waterville. With reference to the two latter, it is worthy of notice that the Irish Free State, by the Treaty of 1921, is only free to establish wireless and cable stations on its territory with the approval of the British Government, but that the latter can land additional cables or erect further wireless stations there, if these are necessary.

From these four points radiate the cables to the British and foreign world. Some 16 of the 21 cables, which join Western Europe with the North American continent, issue from these bays, and, on the other side of the ocean, ten reach their first land fall at Harbour Grace, Heart's Content, Bay Roberts and St. John's, the cluster of cable stations on the Avalon peninsula of Newfoundland. Two go direct from Waterville to Canso in Nova Scotia. The other cables either land in American territory or touch at Fayal in the Azores, and, therefore, do not possess the same strategic value as the twelve which cross from British territory to British territory, without landing anywhere on foreign soil.

Six of these twelve are British owned, five of the six being leased to and operated by an American Company, the Western Union Telegraph Company; the remaining one is both owned

*The English
and Irish
Cable
Stations*

*The Atlantic
Cables*

and operated by Britain, as is another cable, not "all red" which runs *via* the Azores.

The West Indies "All Red" Route The cable stations in Newfoundland are connected by short cables with Nova Scotia, and from Halifax there runs an "all red cable" *via* Bermuda and Turks Islands to Jamaica, Trinidad, Barbados and British Guiana. The isolated position of the Turks Islands, in which is situated the island of Grand Turk, the junction of the whole British network to the West Indies, requires mention. It lies to the north of and close to Haiti, over which the United States exerts a virtual protectorate.

The "All Red" Route to India The "all red" route from Great Britain to India runs as follows:—Porthcurno to Gibraltar (2 cables. There are several others which touch at Portuguese territory): Gibraltar *via* Malta to Alexandria (5 cables): Alexandria by land line, *via* Cairo to Suez or by cable to Port Said, and thence, by land line to Suez. From Suez to India and Ceylon, all cables are "all red," and the route runs, Suez, Perim, Aden, Bombay or Colombo. It will be noticed that the assumption is made above that the telegraph lines crossing Egyptian territory are under British control and supervision.

The "All Red" Route to South Africa The "all red" route to South Africa is a continuation of the above from Aden, and runs thence as follows: Aden, *via* Zanzibar to Durban or *via* the Seychelles Islands, Mauritius to Durban and thence by land lines to Cape Town and other centres. The British cables to South Africa down the Atlantic touch at the Azores and Cape Verde Islands and are therefore not "all red."

The "All Red" Route to Singapore and Hong-Kong From India, cables run *via* Madras, Penang, Singapore to Hong-Kong, either direct or touching at Labuan.

The "All Red" Route to Australia (eastwards) The eastern route to Australia follows the line to South Africa as far as Mauritius, whence it runs *via* Rodriguez Island and the Keeling Islands to Fremantle.

The "All Red" Pacific to Australia Cablegrams can also be sent to Australia by an "all red" route passing through Canada. This route starts from Porthcurno or one of the other terminal stations in England and runs to Harbour Grace or Hearts Content in Newfoundland, and thence by cable again to Halifax in Nova Scotia. Here it follows the Canadian National Railway system

crossing Canada, through Winnipeg, to Vancouver. At Bamfield, near Vancouver, the message would be transmitted by one of the two cables of Cable and Wireless, Ltd. It would pass along one of these cables, three miles below the surface of the ocean, to Fanning Island, and thence to Suva (Fiji Islands) and Norfolk Island, where branches diverge to Southport near Brisbane and to Doubtless Bay near Auckland. If the message is to New Zealand, there is also a direct line, by which it could travel from Suva to Auckland.

It is clear, therefore, that a cablegram could be despatched round the world, travelling throughout by "all red" cables. *An "All Red" Route Round the Globe*
 Its route would be London, Porthcurno, Gibraltar, Malta, Alexandria, land line to Suez, Perim, Aden, Seychelles, Mauritius, Rodriguez, Keeling Island, Fremantle, Southport, (Brisbane), Norfolk Island, Suva, Fanning Island, Bamfield, land line to Halifax, Harbour Grace, Porthcurno, London. A message was sent round the world by this circuit at the opening of Wembley Exhibition in 1924 and took precisely 80 seconds.

During recent years, and particularly since the war, notable improvements have been made in cable transmission which have helped the cable companies to compete with the development of wireless. "Automatic retransmission" by which a message is relayed from cable station to cable station without human interference, adds greatly to the speed of transmission and reduces the likelihood of error.¹ "Scientific routing" avoids the overcrowding of traffic on any cable system. Most cables are "duplex"; that is to say, two messages can pass over the same cable in opposite directions at the same time. "Loaded" cables have been laid on some of the more important routes, in which an alteration in the inductance increases their capacity four or five-fold. "Wired wireless" enables a third message to be sent over comparatively short stretches of cable, superimposed on the two messages which are passing simultaneously by "duplex." By these various devices the capacity of the cable systems has been vastly increased.

¹ This is used on the routes from London to Capetown, Hong-Kong, Singapore, Rio, Buenos Aires, Montreal, Bombay, Colombo and Egypt.

IMPERIAL WIRELESS COMMUNICATIONS.

Prior to 1924, long distance transmission by wireless was effected solely by means of high power stations using wave lengths of 10,000 metres or more. The capital outlay and running expenses of such stations were very considerable, and the method of transmission had the defect of broadcasting the waves in every direction, instead of transmitting them towards the receiving station. While useful, therefore, for communication with ships at sea, they were uneconomic as regards point to point communications between countries.

*Beam
Wireless*

In 1924, however, a new method of transmission, by short wave directional wireless was developed by Marconi. It was found that waves of 15 to 40 metres, which required much less electrical energy to produce, could be concentrated in a beam, by a reflecting device, thereby avoiding the immense dissipation which necessarily occurs in broadcasting in every direction. Capital outlay and running expenses could be correspondingly reduced, and reliability would be increased.

So great were the obvious advantages of this new system of transmission that beam wireless was immediately adopted for Imperial needs. The British Government, while retaining their high-power post office station at Rugby which is necessary for long distance communications with ships at sea,¹ placed contracts with the Marconi Company for beam installations, at Bodmin (transmitters) and Bridgwater (receivers) for communication with Canada and South Africa, and at Grimsby (transmitters), and Skegness (receivers) for communication with India and Australia. In addition, the Marconi Company erected a transmitting station at Dorchester and a receiving station at Somerton for communication with the U.S.A., Shanghai and other parts.²

Two beam stations in Australia, at Ballan and Rockbank near Melbourne, now communicate with Montreal and Great Britain. In Canada, the transmitters are at Drummondville, 40 miles east of Montreal, and the receivers at Yamachiche

¹ Rugby is also used as the transmitting station for the radio telephone services now available to the U.S.A., all British Dominions, India and Japan. Baldock is the receiving station

² There are beams to Egypt and Japan. There are also wireless circuits (not beam) with the Falkland Islands, Santiago and Bogota. Transmitters at Dorchester and receiving station at Brentwood

about 25 miles north of Drummondville. In South Africa beam stations have been built at Klipheuval (transmitter) and Milnerton (receiver), near Cape Town. In India the sites of the stations are at Kirkee (transmitter) and Dhond (receiver) near Poona. The reflector, in the case of the beam to Australia from England, is placed between two aerials so that messages can be transmitted to Australia either eastwards or westwards. In addition to the above, beam services to Rhodesia and Kenya have more recently been established. For Nairobi and Salisbury the transmitting station is at Ongar and the receiving station is at Brentwood.

One other point is worthy of notice. It will be observed that almost all the Imperial wireless stations in Great Britain are west of a line from the Wash to Weymouth, viz., they are outside the area particularly concerned with the Air Defence of Great Britain, and most liable to air attack.

THE ADVANTAGES AND DISADVANTAGES OF WIRELESS CONTRASTED WITH CABLES

Wireless possesses a great variety of uses to which it can be applied. It can be employed for communication between ship and ship and between ship and shore; for direction-finding at sea or in the air; for the collection and transmission of meteorological information from shipping; for broadcasting propaganda, etc.; for direct communication from point to point on land and in the field; for issuing orders, directions and information to fleets or air fleets from their bases, or between aeroplanes in flight; and for wireless telephony over long distances, such as the services operating between Rugby, U.S.A., and the Dominions. It does not depend on intermediate stations: it entails less capital outlay: it is independent of sea power. *Advantages*

On the other hand, it has the great disadvantage, from a military standpoint, of lack of secrecy. No method has yet been discovered whereby complete secrecy can be ensured, except, perhaps, by the use of automatic coding and decoding instruments, whose mechanism and systems might eventually become known to an enemy.¹ Even beam wireless only *Disadvantages of Wireless*

¹ It is claimed that by the use of invertors, the radio-telephone services from Rugby can now be operated with a great degree of secrecy

restricts the area in which messages, travelling towards a certain destination, can be tapped. The tracks of the beams to India and Australia are wide and pass in great circle routes over many countries. Both beams, for instance, traverse Russia, and the beam to India crosses Afghanistan. Tapping or "jamming" by intermediate stations is feasible, and the two important and necessary qualities of a system of communication during war—secrecy and reliability—are therefore not completely ensured.

*The
Amalgama-
tion of
Cable and
Wireless
Interests*

In view of this, and also in view of the fact that the smaller capital outlay and expenses of the beam stations would probably enable them to capture much of the traffic previously carried by cables, and perhaps drive the cable companies into a situation where they would be faced with the alternatives of liquidation or sale to a foreign combine, the British Government decided in 1928 that some measure of amalgamation between the two sets of interests was imperative. Accordingly, on the recommendation of a Committee, representative of the various countries of the Empire, a merger was arranged between the Marconi and Eastern Telegraph interests, and a communications company, known as Imperial and International Communications Ltd.,¹ was formed which took over the business of these concerns and obtained a lease of the beam systems. This Company,² now controls the Eastern Telegraph and Associated Cable Companies, the Pacific Board cables, the two Imperial Atlantic cables, the West Indian cable and wireless system, the Marconi wireless system and the beam systems. Traffic can be pooled. There are adequate guarantees of British control in peace or war; and in time of war or national emergency the Governments of the Empire assume control of the whole system. It is also laid down that the Fighting Services are entitled to build and work cable or wireless stations for their own requirements, though not for commercial purposes.

*Broadcasting
in War and
Peace*

No doubt in future wars an important phase of wireless

¹ Now known as Cable and Wireless, Ltd

² The Chairman and one other director are persons approved by the Government, and there is an Advisory Committee which can be consulted on all matters of policy and consists of one representative from each of the Dominions, one from India, and a representative of the Colonies and Protectorates

activity will be the broadcasting of propaganda to hostile and neutral countries. Such propaganda cannot be made liable to censorship. Preparatory propaganda, before a declaration of war, to prove to the enemy or to neutrals the justice of one's cause; subversive propaganda aimed at destroying the loyalty of sections of the population in an enemy country; stories of defeat to weaken morale and destroy the will to win will all probably be utilized.¹ The only effective reply will be counter propaganda demanding the utmost skill and knowledge of human nature.

It is evident that, in both peace and war, broadcasting can be of service as an additional and very valuable means of contact between the scattered peoples of the British Empire. The system of Empire broadcasts, inaugurated by the B.B.C. in 1932, carries British news, sport, music, etc., to homes in the Dominions and in East and West Africa. At present, this transmission is mainly one-way traffic only; perhaps, in the near future, it may be equally possible for the citizens of Great Britain to listen, when they wish, to programmes from the Dominions.

As regards Great Britain itself, the value of broadcasting in time of national crisis has been already exemplified during the General Strike and again in the autumn of 1931. In the still greater crisis of war it might be used as an instrument for preventing panic and for the preservation of national morale.

¹ Britain, in spite of the multiplicity of languages spoken in the Empire, at present broadcasts only in English. In view of the extensive use made by certain foreign countries of languages other than their own for broadcast propaganda purposes, it has been suggested that the present British policy should be modified. The difficulty would appear to be that the B.B.C. considers that its duty, in peace-time, is to give the news in an objective sense only. To use other languages than English would appear to foreigners as engaging in definite counter-propaganda, which, whatever its advantages, might tend to exacerbate international relations.

CHAPTER XIII

CANADA AND NEWFOUNDLAND

THE land area of the Dominion of Canada is 3,510,000 square miles. It is, therefore, almost as large as Europe including Russia ; is twice the size of India and is over 500,000 square miles larger than the continental territory of the United States. The most northerly part of its mainland is in the same latitude as the northern coast of Norway : its most southerly part is near Latitude 42°, which is approximately the latitude of Rome. From Halifax, on the Atlantic seaboard, to Vancouver, on the Pacific, is 3,775 miles by rail, or 1,300 miles further than from Halifax to Liverpool by sea ; from Vancouver to Yokohama is 4,200 miles, or only 1,900 miles less than from Vancouver to Liverpool—facts which illustrate the great extent of Canadian territory from east to west, and indicate also the central position which the Dominion occupies between Europe and Asia.

Of all the British Dominions, except Newfoundland and the Irish Free State, it is the nearest to Great Britain ; it is the greatest in area : its resources are such that its external trade is double that of Australia, three times that of the Union of South Africa, and six times that of New Zealand. Over 27 million tons of sea-going shipping entered and cleared at its ports in 1934-1935, a tonnage which was greater than the corresponding total for India, Australia, New Zealand and the Union of South Africa combined. Its population of 10,354,000 (1931) is the largest population of European stock in any country of the Empire, except Great Britain. Hence, by reason of its situation, its resources and its man power, it may be expected to take an important part in all matters affecting the trade and defence of the Empire.

THE RESOURCES OF CANADA

Mineral Resources

The mineral resources of Canada are considerable and widespread. Easily mineable coal is found chiefly in Alberta

and British Columbia, though there are important smaller deposits in Nova Scotia, New Brunswick and Saskatchewan. Most of the Alberta coal, however, is lignite, which requires a special process to be made of use for manufacturing purposes, while the good supplies of hard coal come from the two ends of the southern frontier, remote from the industrial centres in the neighbourhood of Montreal and Toronto. Nor in any case are the supplies of hard coal sufficient for home requirements and considerable quantities are therefore imported from the United States.

The development of the coal industry has no doubt been handicapped by the easily tapped sources of energy in the form of water-power. These have been rapidly developed, for they offer the advantages of being widely distributed except in the Prairie Provinces, of requiring little labour after the initial expenditure, and of giving electric power which is easily transmitted over large distances. This hydro-electric power is practically all derived from the neighbourhood of the frontier.

The iron ore resources of Canada are mainly situated in British Columbia, Nova Scotia and New Brunswick, and are therefore badly placed in relation to the industrial regions, which are in the neighbourhood of the Great Lakes. Hence, though there are adequate resources available within the Dominion, their development has been retarded and a large part of the iron and steel required by Canada is imported, chiefly from the United States.

Large quantities of copper ore are produced, most of which is exported to the United States. More than half of the total production is obtained from British Columbia, and most of the remainder comes from Ontario where it is derived from the nickel-copper ores of Sudbury. The production in both regions has recently increased and Canada now makes a very important contribution to the world's supply of this metal.

Mines at Sudbury in Southern Ontario provide about 80 per cent. of the world's supply of nickel ore, the only other sources of importance for which in the world are New Caledonia and Bolivia. The Canadian supply is smelted in Canada, but the refining processes are not carried out there, approximately 50 per cent. of it being refined in the United States,

and the balance in Great Britain. The virtual monopoly which Canada possesses in regard to this metal, necessary in industry and indispensable in war, is very important. It has also now become the chief producer of platinum.

Lead is produced in considerable quantities in British Columbia, the Yukon, Ontario and Quebec; and British Columbia also produces about 6 per cent. of the world's supply of zinc ore.

As in the case of nickel, Canada is markedly predominant in its possession of asbestos, of which it supplies 56 per cent. of the world's total. The most important deposits are in the province of Quebec.

Gold is produced in Ontario, Northern Quebec, British Columbia and the Yukon district in fairly large quantities and in minor quantities in other provinces. The Porcupine and Kirkland Lake areas of Ontario and the Klondyke region of the Yukon are of particular importance. Ontario also, from the Cobalt district, produces practically all the silver and cobalt mined in Canada.

Some idea of the importance of Canada as a supply base for minerals and ores can be gauged from the following. It can supply all the world's requirements of nickel and asbestos, and large amounts of gold, platinum, copper, zinc, lead, silver and cobalt. Its weaknesses are a lack of suitable hard coal and of iron ore situated near its industrial regions, and an almost complete dependence on imported petroleum. Some of these weaknesses may, however, be partly overcome. Given a satisfactory process, the resources of brown coal in Alberta will be an enormous commercial asset; and, in any case, water power is available as a cheap substitute. The construction of a through ship canal along the St. Lawrence system would bring the iron ore of New Brunswick (and Newfoundland) more cheaply to the industrial area; and, with regard to petroleum, there is little doubt that considerable resources, as yet untapped, exist, particularly near the Mackenzie River.

Agricultural While it is still true to say that the real Canada, where agriculture and industry flourishes, is a narrow belt some two or three hundred miles in width along the southern frontier, this state of affairs is gradually being modified to some extent.

The northern boundary of the inhabited region in the prairie provinces is being steadily pushed further to the north, and strains of wheat which can mature quickly enough to ripen in the shorter hot weather of the higher latitudes are being grown with marked success. There is little doubt now that the area available for agriculture is greater than was ever anticipated. At a minimum it is estimated at 441,000,000 acres, of which barely a quarter is occupied at present.

For the production of wheat the great prairie provinces, Manitoba, Saskatchewan and Alberta are pre-eminent, and together with the corresponding plains of the United States, they form the most important wheat fields in the world. The wheat crop produced is now large enough to feed not merely Canada, but the entire population of Great Britain as well. Canada can export 75 per cent. of her crop, whereas the United States with its enormously greater population seldom has a surplus for export of more than 25 per cent., and this tends to diminish. Further, each year sees the opening up of new wheat lands, such as the Peace River region, with a corresponding increase in Canadian production.

While wheat stands supreme as the chief crop in Canada, large quantities of oats and barley are also produced and exported. Maple syrup and sugar, sugar beet, flax, and tobacco are special crops grown principally in Eastern Canada. The fruit growing industries of southern Ontario, the Niagara Peninsula, and British Columbia are of world importance. Dairy products, chiefly from Quebec and Ontario, are being exported in increasing quantities. One and a quarter million square miles of the Dominion are covered by forests, and the lumber industry of the eastern provinces and of British Columbia, the wood pulp and paper industry of Quebec and Ontario, with its dependent activities, such as the manufacture of artificial silk, the production of linoleum, etc., have an ample supply of timber on which to draw.

In short, the Dominion could supply her own needs of wheat and more than Great Britain's requirements of that commodity; and also all our imports of rye, most of our barley, a little less than half of our imported livestock and thirty per cent. of our oats. She must import, however, for her own

needs large quantities of maize, wool, cotton, vegetable oils, rubber, sugar and tea.

Industrial Canada is the second largest manufacturing country in the British Empire and most of her exports to the United States and the Dominions consist of manufactured goods. She is fortunate in being able to base many of her manufactures on supplies of raw materials which are found within her territory. Thus, the milling, fruit canning, meat packing, leather and paper industries are based on home-grown wheat, fruit, cattle and forests. Her important chemical industries, such as the nitrogen fixation plants near the Niagara, with their subsidiary production of nitric acid, ammonium nitrate and explosives, are made possible by the cheap hydro-electric power which is available. On the other hand, her textile industries, her rubber manufactures and her iron, steel and motor engineering works are mainly dependent on imported raw materials; and her fruit canning and meat-packing businesses require large imports of tin plate.

The chief industrial regions are in the extreme south of Ontario and Quebec. Coal supplies close at hand in Pennsylvania, water resources from the St. Lawrence system, and the proximity of American markets, have all contributed to this result. Indeed, the only other industrial areas of any importance in the country are those which are centred round the iron and steel of Nova Scotia and New Brunswick; and the mining, fruit packing and canning industries of British Columbia. Practically all the important industrial areas are within 100 miles of the United States, a fact which would be of great significance in the unlikely event of military operations on the Canadian-American frontier. In this narrow belt lie most of the cities and larger towns of Canada, such as Montreal (818,000), Toronto (631,000), Vancouver (245,000), Hamilton (155,000); and Winnipeg (218,000), the wheat capital, is only 63 miles from the boundary.

The close proximity of the great producing areas, wealth and markets of the United States has resulted inevitably in an economic ascendancy of the United States in Canadian industries and markets. American investments in Canada now total about £800 millions as against £500 millions of British capital there, a state of affairs which implies a large

degree of American financial control over Canadian development.

COMMUNICATIONS

The chief seaports of Canada are Quebec and Montreal on *Ports* the St. Lawrence; Halifax and St. John on the Atlantic coast; Vancouver, Victoria and Prince Rupert on the Pacific, and Fort Churchill on Hudson Bay. In addition to these there are many important ports on the Great Lakes. Few of the Canadian harbours are available throughout the whole year. Thus, though the Great Lakes are never completely frozen, their harbours are generally filled by ice floes during the period December–February, and even to the middle of March, while the St. Lawrence is ice-bound from the middle of December to the middle of April. Hudson Bay is only open for five months in the year, from July–November. The harbours on the coast, however, viz., Halifax (Nova Scotia) and St. John (New Brunswick), and Vancouver, Esquimalt and Prince Rupert in British Columbia are never closed by ice.

The Canadian Pacific Railway, begun in the year 1871 and completed in 1886, assisted the development of the central plains, was chiefly responsible for the settlement of Manitoba, Saskatchewan and Alberta, and disposed of all United States' claims to British Columbia. Its Atlantic terminus is at the ice-free port of St. John (New Brunswick); it crosses the base of the Maine salient, and enters the province of Quebec near Megantic. It then passes through the important junction of Sherbrooke and runs to the St. Lawrence and Montreal. After Montreal, the line passes through Ottawa, and along Lake Superior to Winnipeg, which is the bottle neck of all Canadian railways and proceeds, thence, to Regina, Medicine Hat, and Calgary. At Calgary it begins to ascend the foothills of the Rockies; it crosses the main range at the Kicking Horse Pass, then traverses other parallel ranges (the Selkirk Range, Gold Range and Coast Range), and finally reaches its terminus at Vancouver.

An alternative C.P.R. transcontinental route, runs to Vancouver from Winnipeg *via* Lethbridge, south of the main route. This line crosses the Rockies at Crow's Nest Pass.

*Lines of
Communication
Railways,
—Canadian
Pacific Rail-
way*

*Canadian
National
Railways*

Another transcontinental route is provided by the Canadian National Railway system, which is government-owned and operates the lines originally belonging to the Grand Trunk Pacific, the Grand Trunk, the Inter-Colonial and Canadian Northern Railways. The Atlantic terminus is at Halifax, and the main line runs entirely through Canadian territory to Montreal (*via* Victoria Bridge), and also to Levis, opposite Quebec, near which it crosses the Quebec bridge. From Quebec, the line passes through a barren region to the north of the Great Lakes, and finally reaches Winnipeg. It then strikes north-west through Saskatoon and Edmonton, crosses the main range of the Rocky Mountains by the Yellowhead Pass, and has its terminus on the Pacific at Prince Rupert, a port which is only 3,600 miles from Yokohama.

Canals

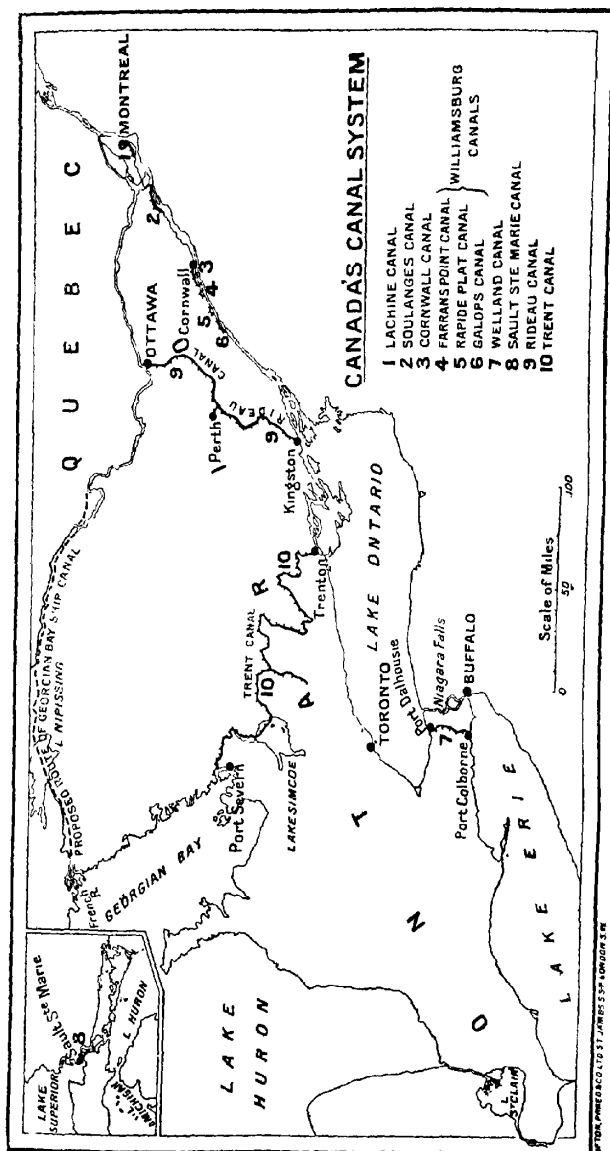
The St. Lawrence and the Great Lakes provide a natural system of waterways for half the distance across the continent, and the value of these natural routes has been increased by the construction of canals in those sections where there are waterfalls or rapids. Of these canals the most important are :—

(1) The New Welland Canal, which connects Lakes Erie and Ontario and runs entirely through Canadian territory parallel to the River Niagara. It has an average depth of 27 feet and is sufficiently deep and wide for ocean-going vessels.

(2) The Sault ("Soo") Canals, which connect Lake Huron and Lake Superior at Sault Ste Marie, consist of two short canals, of about $1\frac{1}{2}$ miles in length, one on the American side of the boundary, and one on the Canadian side. They carry a large part of the wheat traffic of the Prairies and Middle West, as well as much other American produce, and the American canal, which has been greatly improved, is used by greater tonnage annually than any other canal in the world.

*The proposed
St. Lawrence
Ship Canal*

But the value of the St. Lawrence-Great Lakes waterway, for through communications to the sea, is handicapped by two defects at present. Between Montreal and Kingston the river is frequently intercepted by rapids; and the Lachine, Cornwall and Soulanges Canals which provide bye-passes to this section of the river are not deep enough for ocean-going traffic. Also the Lake and River St. Clair, which form the connecting link between Lakes Erie and Huron, require improvements with regard to the navigation channels before



MAP 15.—Sketch Map of Canada's Canal System, showing the proposed route of the Georgian Bay Ship Canal.

they can be used by large ships. At present, therefore, traffic between ports such as Port Arthur, Fort William, Duluth, Chicago, Milwaukee, etc., and the ocean ports at Montreal and Quebec can only be maintained by shallow vessels. This entails costly transshipment or loading on rail, and adds considerably to the cost of the produce exported from central Canada and the Middle West. In view of this fact, in July 1932, after protracted negotiations, the Canadian and American governments signed a Treaty, the primary purpose of which was to provide a through waterway, with an average depth of 27 feet, from the ocean to Lake Superior. The project would entail great engineering works, would cost over £100 millions, and would take some ten years to complete. It would require the construction of two large dams on the St. Lawrence between Montreal and Kingston (at Barnhart Island and Cupler Island), as well as the deepening of the navigation channel through the St. Clair. It is claimed, however, that the expenditure would bring many benefits by providing employment, stimulating industry and making cheaper transport possible. It is also anticipated that hydro-electric power to the amount of 2 million horse power would become available as a bye-product from the scheme. When completed, it would provide a waterway from the Atlantic to the centre of the North American continent, a new Mediterranean Sea, deep enough for 90 per cent. of the shipping of the world to use.

There is still, however, considerable opposition to the scheme in various quarters where vested interests in transshipment facilities are likely to suffer. The most serious criticism which can be urged against it is, however, the fact that the waterway would not be open for through communications between December and April, owing to ice and fog in the St. Lawrence. It would, however, be available at the period when the traffic is normally greatest, viz., after the harvest in Canada and the United States. The opposers of the scheme have, up to the present, succeeded in preventing the ratification of the treaty by the American Senate.

*The New
Le Pas-Fort
Churchill
Railway*

A study of a map of communications in Canada shows that it has until recently lacked any form of back-door entrance, remote from the United States. Such an entrance has recently

been provided. A railway, originally designed to run from Le Pas to Port Nelson, has now been completed to a terminus at Fort Churchill further north on Hudson Bay. The shortening of distance by this new route is very remarkable in the case of shipments sent from points west of Winnipeg to European ports, the approximate saving to Liverpool being 900 miles. The disadvantage of the route is that the entrance to Hudson Bay is only open for five months in the year ; but, on the other hand, it is stated that the ice found there is of a type which can easily be dealt with by modern ice-breakers, and that a passageway can be kept clear throughout the winter.

THE MAN POWER OF CANADA

The population of Canada in 1931 was 10,354,000,¹ as compared with 8,788,000 in 1921. Of the total, about 5½ millions, or 55 per cent. were of British origin ; about 2¼ millions were of French descent (mainly in Quebec) ; and, of the remainder, the chief sections were composed of persons of German, Scandinavian, Dutch, Austrian or Russian blood. The people of Asiatic race number about 200,000. The population is therefore of a composite nature, and time will be necessary before it can all be fused into a homogeneous nation. This process of assimilation is, however, proceeding, and Canadian nationality quickly becomes a reality to the majority of immigrants. Nevertheless, it must be emphasized that it is only from the population of British origin that a large proportion of recruits can be expected in time of Imperial crisis. Thus, out of the 619,636 men who enlisted in the Canadian Expeditionary Force, about 223,000 were born in the United Kingdom and most of the remainder were of British descent.

THE RESPONSIBILITIES OF DEFENCE

The problems and responsibilities of the defence forces of Canada are as follows :—

1. The defence of Canadian coasts and frontiers against external attack.

¹ Estimated in 1936 as 10,949,000.

2. The support of the Civil Power, when necessary.
3. A share in the defence of Canada's and the Empire's sea communications.
4. To contribute to the Expeditionary Forces of the Empire, in cases where the Canadian government decides to participate.
5. To carry out such obligations as Canada may have undertaken as a Member of the League of Nations.

1 *External
Attack*

Canada is separated from Europe by 3,000 miles of ocean ; and from the greatest Asiatic Power by about 4,000 miles. An attack of any magnitude on its coasts by a European or Asiatic Power would, therefore, be an undertaking which could only be successful, if that Power had complete command of one or other of these seas for a long period. That would imply that the British Navy had suffered a disastrous defeat. Further, if such an attempt were made against Canada, it would no doubt be regarded by the United States as an infringement of the Monroe Doctrine and would be strenuously resisted by her.

An attack by the United States on the land frontier or coasts of Canada is generally agreed to be inconceivable. Ties of race, language, sport, finance, industry and commerce bind Canada and her great neighbour. Competitive armaments are unknown. The Rush-Bagot Treaty of 1817, which limited the naval forces of both countries on the great lakes to a negligible amount, has been scrupulously observed, and the "unguarded frontier" is a source of pride to all the people of North America. Were it otherwise, the problems of defence against external attack might well be serious, as economic and geographical facts would combine to handicap Canadian defence.

1. The defence of the frontier would not be greatly assisted by natural physical features except towards its eastern end. The boundary runs from Passamaquoddy Bay in New Brunswick round the great salient formed by the State of Maine chiefly through difficult country. From the western side of this salient it is merely an artificial line, formed by Latitude 45° N., for about 140 miles, until the St. Lawrence is reached. It then follows the centre of the St. Lawrence, Lake Ontario, the Niagara River, Lake Erie, Lake Huron, the St. Mary River

and Lake Superior to a point south of Fort William which is marked by the exit of the Pigeon River. Here it traverses a line of smaller lakes to the south-west corner of the Lake of the Woods. From this point, which is approximately half-way across the continent, to the Pacific the boundary is Lat. 49° N, an artificial line which bears no relation to existing physical features. Similarly, the boundary between Alaska and Canada is mainly the line of Longitude 141° W. The geography of both the southern and western boundaries possesses, therefore, little strategic significance.

2. The inhabited part of Canada is a comparatively narrow belt, two to three hundred miles in width, along the southern frontier. Within this belt are situated all the most important cities and industrial areas of the Dominion. Every important manufacturing centre is close to the frontier, and most of them are in the neighbourhood of the St. Lawrence or the Great Lakes ; whereas, on the other hand, those of the United States are not all concentrated near the boundary between the two countries.

3. The transcontinental communications of Canada are also within this belt. The Canadian Pacific Railway, indeed, runs through the State of Maine shortly after leaving the terminus at St. John ; the Canadian National line closely skirts the northern boundary of the same state. Most of the railway junctions of first-class importance are not remote from the frontier. Sherbrooke on the C.P.R., where lines to St. John, Montreal and Boston meet, and Montreal itself are less than 50 miles from the nearest points on American territory ; Winnipeg, the bottle-neck of all railway communications from the eastern to the western Provinces is 63 miles from the frontier, and Vancouver the terminus on the Pacific side is only a few miles from the boundary line. Further, the " Soo " canals, which join Lake Superior and Lake Huron and which carry a great part of the wheat traffic from the Prairie Provinces on its way to the ocean ports, are situated along the boundary line itself.

4. The chief mineral resources of Canada, with the exception of nickel, platinum, asbestos, and gold are undeveloped. Hard coal, suitable for manufacturing purposes, is not produced in quantities sufficient to meet more than 50 per cent. of the

normal peace demand, and the balance is imported, chiefly from the United States which has minefields in close proximity to Canadian industrial centres. The hydro-electric power which is used as a substitute for coal is mainly produced on the St. Lawrence system of waterways, and in some cases, such as the Niagara supply, comes from the region of the boundary itself.

5. Lines of sea communication from Great Britain to ports such as Halifax and St. John must pass within a region where American naval power would probably be predominant. Lines of communication by the St. Lawrence to Quebec and Montreal are hazardous owing to fog and ice from December to April. There is no ocean port on the northern side of the St. Lawrence until Quebec is reached, nor any railway communication on that side from the Atlantic to Quebec. The new route from Liverpool to Fort Churchill is only open from July until November owing to ice in Hudson Bay and its outlet.

On the Pacific side, sea communications from other British Dominions or from naval bases such as Sydney, Singapore and Hong-Kong to Esquimalt and Vancouver pass across 6,000 miles of open ocean, and are flanked by first-class American bases at Pearl Harbour, San Francisco and Puget Sound.

6. The population of Canada (11 millions) is less than one-eleventh that of the United States, and is not homogeneous in race or language—only 55 per cent. of it being of British stock.

2 *Support
of the
Civil Power*

This responsibility is likely to arise no more frequently in Canada than among other civilized and well-balanced peoples. As in Great Britain, if the necessity occurs, it is a responsibility of the permanent force and not of non-permanent units.

3 *Defence of
Sea Commu-
nications*

Canada's seaborne trade is greater than that of any part of the Empire, except Great Britain. Thus, in addition to the 27 million tons of shipping which cleared at its ports in 1935, over 80 million tons of coasting vessels used its harbours during that year. The chief markets of the Dominion for agricultural exports are across the seas; many of the raw materials for its industries, such as wool, rubber and tin, are conveyed to Canada by sea; the total tonnage of Canadian vessels is $1\frac{1}{2}$ million tons. Apart, therefore, from

any Imperial aspect, there is a strong *prima facie* case for Canada to maintain a naval force of sufficient size to co-operate adequately with the British Fleet in the protection of Canada's sea communications.

Though no attempt is made by Canada to maintain forces specifically for the purpose of providing Imperial contingents, or going to the assistance of Great Britain if attacked, the history of the last half century shows how great a response has been made to any Imperial necessity which has arisen. Canadian voyageurs served in Egypt and the Sudan in 1882: eight Canadian regiments and other troops were despatched to South Africa for the Boer War: and the Canadian Expeditionary Force sent to Europe during the Great War was remarkable both in its numbers and its fighting qualities. In this connection, it should be noticed that the Dominion Military and Air Forces can be used outside Canada for the defence of the Dominion.

As a member of the League of Nations, Canada could hardly hold aloof from a "League War." She did not, however, ratify Article X of the Covenant, and is, therefore, not committed to a general and indefinite guarantee of the frontiers of the world.¹

Indeed, a survey of the defence problems of Canada, in the light of its geographical situation, its friendly relationship with the United States, the common interests of both and the implications of the Monroe Doctrine, reveals the negligible dimensions of its problems of local defence. There is therefore not the same urgent stimulus to develop strong forces as exists in the cases of Australia and New Zealand, whose territories are remote from Great Britain and which lie on the edge of an area where international problems are becoming more acute. Nor has Canada potential problems of internal security comparable with those which exist in South Africa.

It has, however, an insistent problem of another nature. Its danger is not military attack but peaceful absorption by a powerful and wealthy neighbour. American influences, social, economic and financial, can easily spread across the frontier and, unless counteracted, might lead eventually to the withdrawal of the Dominion from the British Commonwealth.

¹ See also Chapter XX.

The real guarantees against this contingency are the development of the Dominion so that the disparity in opportunities and wealth, between the two countries, is reduced; and, secondly, the growth of a large population attached to the British connection. Hence, expenditure on sound schemes of internal development, on communications and on the settlement of British immigrants in Canada are, in fact, indirect contributions towards the solidarity of the Empire. But, in Canada, as in the other Dominions, the unsettled world outlook has led to increased expenditure on defence. The 1937-8 estimates allowed for a considerable increase in the Air Force, as well as smaller increases in the naval and military establishments.

THE DEFENCE FORCES OF CANADA

The Military, Naval and Air Services of Canada are controlled by the Department of National Defence, the head of which is a Minister of National Defence who is advised by a small Defence Council of seven members including the chiefs of the General Staff and the Naval Staff.

The Military Forces

The Military forces are constituted under the Militia Act of 1906, which renders all males between 18 and 60 years of age, who are not exempt or disqualified by law, liable for military service in Canada or beyond Canada for the defence of the Dominion. The forces consist of:—

- (a) The Permanent Force.
- (b) The Militia.
- (c) The Reserve Militia.

The Permanent Force

The Permanent Force (The Permanent Active Militia) is composed of 2 Cavalry Regiments, 3 Batteries of Horse Artillery, 5 Medium and Heavy Batteries, 3 battalions of infantry, with a due proportion of other arms and services, making a total strength of about 3,800. It trains throughout the year on the same general lines as the British Regular Army, and, in addition, its officers and N.C.O.'s are called on to assist in the training of the Non-Permanent Active Militia. It also finds the garrisons, for the Canadian naval bases at Halifax and Esquimalt, and, by law, is the first part of the Defence Forces to be called out in aid of the Civil Power. Officers of the

Permanent Force take the War Office qualifying examinations; exchanges are arranged with British regiments, and three annual vacancies are allotted at the Staff Colleges at Camberley and Quetta.

The Militia (The Non-Permanent Active Militia) corresponds *The Militia* in a general way to the British Territorial Army, and is made up of Corps raised by voluntary enlistment on a basis of three years' service, which may be extended to four years in case of emergency. It consists, at present, of 27 regiments of Cavalry or Mounted Rifles; 71 Field Batteries; 27 Medium and Heavy Batteries; 130 battalions; and a due proportion of other arms. Its total establishment is about 9,000 officers and 125,000 other ranks, but at present, it is much below this strength. The training is generally similar to that of the British Territorial Army, but no "permanent staff" is attached to Militia Units. Its members are liable to be called out for training for a period not exceeding 30 days in any one year.

The Reserve Militia, which includes a reserve of officers *The Reserve Militia* and a reserve unit for each active unit, is intended to provide for the organization of the officers and men who have completed their service in the active militia or have received a military training otherwise. Men are not posted automatically to reserve units on completion of their service in the active militia, but these units are recruited by specific enlistment.

The Royal Military College, Kingston, gives cadets a military *The Royal Military College* education, together with a training in engineering, surveying and physics, and the course extends over four years. All appointments to commissions in the Canadian Permanent Active Militia and R.C.A.F. are offered in the first instance to graduates of the college, while commissions in the British Regular Army, the Indian Army and the R.A.F. are also offered annually, but most of the cadets return to civil life and become officers in the Non-Permanent Active Militia. Graduates of the R.M.C. Kingston are given one year's seniority in the British and Indian Armies, because of the length of the Kingston course.

The Royal Canadian Air Force consists of a Permanent *The Air Force* Active Air Force and a small Non-Permanent Active Air Force. Many of the officers of the Permanent Force undergo flying

courses in England ; a limited number serve for a period with British units, and vacancies at the Air Staff College at Andover are allotted to the R.C.A.F. The strength of the permanent force is about 200 officers and 1,500 airmen, and of the non-permanent force about 120 officers and 600 airmen. By the defence estimates of 1937-8 provision is made for the acquisition of 102 aeroplanes and an increase of one-third in air force personnel.

The Naval Services

The Naval Services consist of a permanent force, the Royal Canadian Navy, and also a Reserve and Volunteer Reserve. The officers and many of the seamen of the R.C.N. do a great deal of their service with the Royal Navy. Thus, Canadian officers immediately on appointment are generally transferred to ships of the Royal Navy, remaining there continuously until they become sub-lieutenants. After attaining that rank, they are employed alternately in R.N. and R.C.N. appointments, so that uniformity in outlook, and methods of training is ensured. The Royal Canadian Navy consists at present of two destroyers and two mine sweepers based on Halifax and a similar number of each based on Esquimalt.¹ It is, therefore, merely in the nature of a small coast defence force and training cadre, and is not adequate to take an important share in the defence of Canada's seaborne trade outside Canadian waters. It is, however, a basis for expansion.

Munitions

There are Dominion Arsenals at Quebec and Lindsay (Ontario). Raw materials and cordite for small ammunition are obtained in Canada ; other raw materials and explosives are imported.

THE IMPERIAL ASPECT OF CANADA

From an Imperial standpoint, Canada has various aspects of great importance. Politically, its associations with both Great Britain and the United States are so many and so intimate that the Dominion serves as a connecting link between the two great Anglo-Saxon countries. Both would suffer through any decay in its fortunes ; both share in any increase in its prosperity. Economically, it is the greatest

¹ By the 1937-38 Estimates 4 more mine-sweepers were authorized.

actual and potential granary in the Empire and perhaps in the world. Already it is Great Britain's chief source of wheat supply ; and only a small part of its 400 million acres of suitable land is under cultivation. Strategically, it is a region through which passes one of the important lines of Imperial communication from Great Britain to the Pacific.

But perhaps its chief importance is that at some future time it may be the home of a great part of the white population of the British Empire. Various estimates have been made of the population which it could sustain, and all agree that, with its enormous acreage of agricultural land and its immense resources of lignite and water power, it could hold a population of at least 100 millions, or far in excess of any population which it is anticipated Great Britain could support. Over a period of 40 years its population has increased at an annual rate of 18 per thousand, and there is no reasonable doubt that, with the development of some process by which the lignite resources could be used commercially for manufacturing and with the general opening up of the country, this rate could be greatly accelerated. There is, thus, a prospect that Canada may be the chief centre of white population in the British Empire, even in the lifetime of some who are now living.

NEWFOUNDLAND AND LABRADOR

Newfoundland, the oldest of the British Colonies and the least populated of the Dominions, lies across the entrance to the St. Lawrence, 1,800 miles west of Ireland, and 70 miles north-east of Nova Scotia. It has an area of 43,000 square miles (about as large as Ireland and Wales combined) and a population of 272,000 (1929). A rugged coast, with deep indentations providing numerous sheltered bays, and an interior of rolling country, composed of great marshes, numerous islanded lakes, large areas of moss-covered rocks ("the Barrrens") and long strips of woodland and coniferous forest running in parallel lines from north to south are its chief physical characteristics.

Off the south-west corner of the island is the great submarine plateau of the Banks, one of the most important fishing grounds in the world. Here the waters of the Gulf Stream and the

cold Labrador current meet; and the mixture of the warm and cold air above these ocean streams causes condensation of the moisture in the air and gives rise to the fogs which so often envelop that region. Though situated in the same latitudes as the south of England, Newfoundland has a more severe climate owing to the Labrador current; and, in winter the coast is within the ice line.

Resources

The mineral resources of Newfoundland are considerable. Large beds of rich hematite iron ore exist at Bell Island and Conception Bay on the east coast and other deposits are found on the west coast. Some coal is found, but the quantities mined are small, and the requirements of shipping have to be imported. Small quantities of copper, silver, nickel, gold, asbestos and mica are also produced. The most important products are dried cod (mainly exported to Latin Europe) wood pulp and paper, iron ore, herring, seal and cod oil. Most of the food required by the population has to be imported.

Man Power

The population is practically all Newfoundland-born, of British descent and is chiefly engaged in fishing, lumbering and mining. 5,000 fought in the military forces in the Great War; some 3,000 served with the Navy and many others served with the merchant service. No military, naval or air services are maintained.

Imperial importance

Newfoundland is only 1,800 miles from the British Isles, is remote from the naval ports of the United States and has a loyal and hardy population. It could provide, in case of need, natural harbours, which would serve as links between the home ports and Canada. St. John's, Harbour Grace, Carbonear, or indeed any of the great bays like Trinity Bay, Placentia or Bonavista would be suitable as havens, though at present none of them, with the exception of St. John's, is developed.

Further, the Avalon Peninsula is the landing place of most of the transatlantic cables, and Heart's Content, Harbour Grace and Bay Roberts are notable cable stations. There is also a large wireless station at Cape Race.

And, lastly, Newfoundland and Labrador may become important in relation to transatlantic air traffic because they both lie on projected air routes from Europe to Canada and the United States.

Until 1933, Newfoundland enjoyed complete Dominion *Political*
status. In that year, however, an investigation into its *Status*
financial position led to the temporary suspension of the
constitution at the wish of the electorate. A commission
appointed by the Crown is carrying on the administration
until such time as the financial position is restored.

CHAPTER XIV

AUSTRALIA AND NEW ZEALAND

THE Commonwealth of Australia has an area of 2,975,000 square miles, or approximately the same as that of the United States. From east to west it measures about 2,400 miles; from north to south, about 2,000 miles. It is the largest isolated land mass in the world, except the South Polar Continent, and is also, with that exception, the farthest of the continents from the great centres of population and trade around the North Atlantic. This isolation explains the fact that it is the newest of the continents in respect of discovery and settlement; while its physical characteristics go far to indicate why the process of settlement on so great an area has been so slow that the density of population to-day is only two persons to the square mile.

Its physical features fall into three well defined divisions: (a) the Eastern Highlands; (b) the Central Lowlands; (c) the Western Plateau.

From the eastern seaboard a narrow, well watered, and well timbered coastal plain rises quickly to the Eastern Highlands, a great cordillera region which has been planed down by erosion to a succession of plateaux, whence rise, in the south-east corner, like "humps upon the surface of the plateau," the greater heights of the Australian Alps in Victoria and the Blue Mountains in New South Wales. Though none of these hills are higher than 7,000 feet, and little of the plateau is above 2,000 feet, it presents to the Pacific a steep scarp-like face, which limits rail communications with the interior to the natural gateways worn by streams, such as the Cassilis Gap behind Newcastle, the Lake George Gateway near Canberra, and the Kilmore Gap north of Melbourne.

(b) *The Central Lowlands* The Eastern Highlands slope gently down to the Central Lowlands, a great saucer-like area which covers almost a third of the whole continent, and which falls at Lake Eyre below sea level.

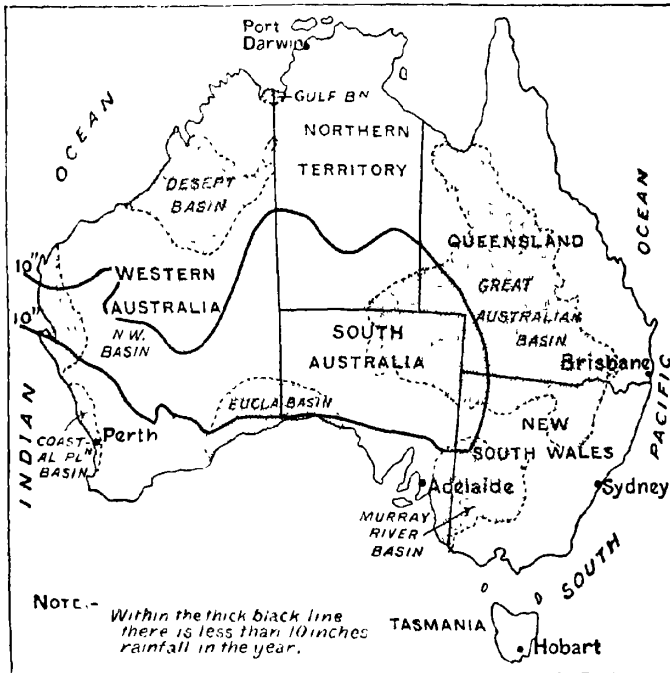
The Central Lowlands rise on their western margin very slowly to the western tableland, an immense block of ancient rock, averaging about 1,000 feet above sea level, and extending over almost half the continent. This plateau descends gradually to a narrow coastal plain on the west ; but, on the south, its edge is a cliff escarpment, two to three hundred feet in height, along the coast. Here, the line of cliffs formed by its edge is unbroken for hundreds of miles from King George's Sound, eastwards, and there is no harbour of any size between Albany and Adelaide.

The northern coast of Australia is as near the equator as is the Malay Peninsula ; the southern coast as is Spain or California ; the Tropic of Capricorn cuts almost across the middle of the continent. Insularity and a lack of high altitudes, unite to ensure remarkably uniform conditions of temperature. The northern half is hot ; the southern half is warm ; but in neither case is the temperature as high as in other regions of the same latitude.

The rainfall of Australia, like that of India, is the key to the understanding of many of its problems. North Australia and Northern Queensland lie in a Monsoon region of heavy summer rains and winter droughts : the Pacific coast receives the S.E. Trades, which deposit plentiful and reliable rainfall throughout the year ; the south-east corner, including most of Victoria and New South Wales, encounters the Westerlies, in the cool season, and has heavy winter rains and summer drought ; and the south-west corner, which also lies in the track of the Westerlies, experiences similar conditions to those obtaining in Victoria. The great central plain, including most of South Australia and Central Australia, and a large part of the Western tableland receive an exiguous and uncertain rainfall, varying from ten inches to less than one inch annually.

It is evident therefore that intensive cultivation and settlement are limited by these climatic conditions to those areas where cultivation and settlement are now most marked, viz., the southern half of the Pacific coast, the south-east and south-west corners, regions in which there is adequate rainfall and a moderate temperature. It is true that this area can be extended for pastoral purposes by the fuller use of

the artesian water supply available (see map 17), but close settlement cannot be pushed much further westward, and "the millions of the future will be settled precisely in the regions where the millions of to-day are found." It is also evident, that the periodic variation from



MAP. 17.—Rainfall and Artesian Well Map of Australia. (The shaded portions represent artesian water areas)

rainfall to drought, and the lack of a regular supply, entail the danger of economic disaster in years when the rains do not come to time or come in insufficient quantity. For this reason, agriculture and sheep farming in Australia are more subject to variations of output than is the case in other lands, except perhaps India, and farming is to some extent "a gamble in rainfall."

RESOURCES

(a) *Agricultural*

The agricultural resources can best be described with reference to the chief areas of settlement :—

(1) The Queensland coastal plain which has uniform rain

and tropical temperatures. Sugar is the main crop but dairy farming, maize and fruit are also important.

(2) The New South Wales and east Victorian coast and hinterland. Sheep farming and wheat production are carried on in the drier hinterlands, and maize, oats, fruit and dairy farming occupy the remainder.

(3) The west of Victoria, the east of South Australia and the south-west corner of West Australia, where rain falls chiefly in the winter. Wheat is the chief crop, but dairy farming and fruit are increasing in importance.

In these areas are concentrated over 99 per cent. of the population, practically all the production of wheat, and most of the cattle in the continent. In addition, there is, however, a large sheep farming area, on the eastern highlands, in Southern Queensland, New South Wales and Victoria, which extends inland approximately to the boundary of the ten-inch rainfall line. This area includes the famous Darling Downs east of Brisbane.

Wool is the chief product of Australia, and the Commonwealth leads the world both in the number of sheep and in wool exports. In wheat production it ranks ninth, and it could supply about half of the requirements of Great Britain. The development of a meat export trade has been retarded by the necessity for freezing the beef, a process which destroys some of its nutritive properties; and Australia, therefore, though possessing great cattle resources, cannot compete at present in the English market with Argentina, the beef from which needs only to be chilled, on account of the shorter journey.¹ Large and increasing quantities of butter, hides and skins, fruits, maize and sugar are exported.

Although the coal supplies of the country are not yet (b) *Minerals* developed to their utmost, Australia is more than self-supporting in this commodity. New South Wales possesses the most important coal basins, but it is also mined in Victoria and Queensland. In Victoria, there are large deposits of brown coal and lignite, while there are other important seams of black coal at Ipswich in Queensland.

Extensive deposits of iron exist in every State, except

¹ Recently a process whereby beef can be kept "chilled" in good condition for a longer period has been discovered, and "chilled" Australian beef has been exported.

Victoria, and also on the north coast of Tasmania. Port Kembla in the south of New South Wales is the most important centre of iron production and manufacture. The quantities produced, however, in the Commonwealth are comparatively small, and have to be supplemented by imports from Great Britain and the United States. In the last few years the development of native resources has been increasing owing to bounties paid by the Commonwealth on steel sheets and galvanised sheets produced in Australia.

The greater part of Australian copper supplies comes from mines in South Australia; and, enormous deposits of very rich ore are known to exist over an area of several thousand square miles in the Cloncurry district of Queensland.

The silver-lead mines at Broken Hill are the largest of the kind in the world, and, together with the other chief Commonwealth source at Zechan in Tasmania, produce about 120,000 tons of metallic lead per annum. Tin is found in every State, but the largest supplies come from Tasmania and Queensland.

There are few alluvial gold diggings left in Australia, but the quartz reefs in Victoria, New South Wales and Western Australia still provide a very substantial amount of gold year by year. The most important single field is the Kalgoorlie area in Western Australia.

One of the chief weaknesses of Australia from the standpoint of supplies is an almost complete absence of petroleum. Oil shale does exist, however, in various localities, particularly in Victoria; and producer gas, obtained from charcoal, has been employed successfully on a small scale as an alternative to petrol. Alcohol distilled from sugar cane and mixed with petrol provides a substitute for pure petrol which is marketed with some success in Queensland where it is produced.

(c) *Industrial* The dependence of Australia on imports of manufactured goods is most marked in respect of textiles, jute goods, machinery, drugs, chemicals and paper. Such industries as exist are chiefly for the home market and New Zealand, and the number of hands employed is just over half a million.

POLITICAL DIVISIONS AND PORTS

The Commonwealth consists of the following states and territories :—

1. *New South Wales* (2,500,000). Capital, Sydney. (1,256,000).

The area of New South Wales is about as large as that of France and England together. The two ports of importance are the magnificent harbour of Sydney—Port Jackson, the base of the Royal Australian Navy—and Newcastle, which has admirable supplies of coal from mines in the vicinity.

2. *Victoria*. (1,800,000.) Capital, Melbourne. (1,039,000).

The area is approximately the same as that of Great Britain, and it possesses the best climate and probably the most fertile land on the Australian continent. The chief harbours are Melbourne, Port Phillip at the mouth of the Yarra River, and Geelong also on Port Phillip Bay.

3. *South Australia*. (586,000). Capital, Adelaide. (324,000).

The rainfall map on page 220 shows that the important part of South Australia lies round the two arms of the sea—the St. Vincent Gulf, and Spencer's Gulf. In the neighbourhood of these gulfs there is good agricultural land, but the remainder of the State consists for the most part of bare hills, desert and salt lakes. The chief harbours are Port Adelaide, the port for Adelaide which is nine miles from the sea, and Port Pirie on Spencer's Gulf.

4. *Queensland*. (970,000). Capital, Brisbane. (317,000).

Much of the territory of Queensland lies in the tropics, but is nevertheless capable of great development in the production of sugar-cane, tobacco, etc., provided acclimatized labour is available. The Darling Downs, in the southern part, are some of the best cattle and sheep areas in Australia. The harbours are :—Brisbane, 20 miles from the mouth of the river Brisbane, and possessing a plentiful supply of coal from the coalfields at Ipswich ; and Rockhampton.

5. *Western Australia*. (422,000). Capital, Perth. (210,000).

Western Australia has a total area of about 1,000,000 square miles. The part which is of most importance, however, is the S.W. corner, originally known as the Swan River Colony, lying round Fremantle, Perth and Albany. The important harbours are Perth, 12 miles from the sea on the Swan River, which is navigable for small boats ; and Fremantle, which

suffers from adverse winds and currents which make navigation difficult at certain periods of the year. Albany, on King George's Sound has, since the development of Fremantle and Perth, declined in importance, but is still a coaling station.

6. *Tasmania*. (221,000). Capital, Hobart. (58,000).

Tasmania, about 150 miles distant, across the Bass Straits is mountainous, with a valley running from Launceston in the north to Hobart in the south, through which the main line of railway passes. It possesses a good climate and fertile soil, and exports considerable amounts of fruit, wool, timber, in addition to minerals such as copper, tin and zinc.

7. *The Northern Territory of Australia*. (4,500).

This was divided, in 1927, for administrative purposes into two territories, North Australia and Central Australia, the dividing line being Lat. 20° S. In 1931, the division was repealed and the whole of the Northern Territory is under an administrator at Darwin. The chief harbour is Port Darwin from which runs the railway to Birdum. Alice Springs is at present the northern terminus of the line from Adelaide.

8. *The Federal Capital Territory*. (8,400).

Owing to rivalry between Sydney and Melbourne in respect of the seat of a Commonwealth capital, a compromise was made in 1908, by which New South Wales surrendered to the Commonwealth an area of 912 square miles, known as the Yass-Canberra Federal Capital Territory. The building of the new capital city at Canberra is being carried out and the movement of the Government there has already taken place. At Jervis Bay, about 28 square miles of land and water were also granted by the New South Wales Government to be used as a harbour in connection with the Federal capital.

9. *Other territories of Australia, external to the Continent*, viz. :—Norfolk Island, 930 miles from Sydney ; Papua and the mandated territory of New Guinea. In addition to these Australia shares in the administration of Nauru.

COMMUNICATIONS

The chief sea routes, from Australia, are :—

(1) From the east and south-east ports *via* Sydney, Melbourne, etc., Cape Leeuwin, Indian Ocean, Colombo, Aden, Suez Canal, Mediterranean. (1) *Trade Routes to and from Australia*

(2) *Via* Cape Leeuwin, Cape of Good Hope, South Atlantic, North Atlantic.

(3) From east and south-east ports there is another route which runs inside the Great Barrier Reef. This natural breakwater, which in some parts is nearly 100 miles broad and formed of coral, lies parallel to the coast from Torres Strait for more than 1,000 miles southward. The passage-way is 15–80 miles in width, and is an enclosed channel for communications between Sydney, Brisbane and other ports to the north. Thence, the route is *via* Cape York, Torres Strait, through the deep water channel north of Thursday Island to Singapore, where it branches off to Madras, Calcutta, etc.

(4) The Panama Canal route to North America and the Atlantic.

The railway system of Australia suffers from three serious defects :— (2) *Railways*

(1) Lack of uniformity of gauge.

(2) Lack of lateral communications.

(3) Lack of any connecting link between Port Darwin and the rest of the Continent.

These defects may be ascribed to the fact that the lines were constructed by the various States which comprise the Commonwealth at a time when there appeared to be no prospect of a federation, and when mutual jealousies played a greater part than a common policy. Thus, Victoria and South Australia adopted a 5 ft. 3 in. gauge in the early days of railway construction, while New South Wales selected the British standard (4 ft. 8½ in.) South Australia later added a considerable mileage on the 3 ft. 6 in. gauge which was also chosen by Queensland and West Australia. Later still, when a trans-continental link was built from Kalgoorlie to Port Augusta by the Commonwealth Government, the 4 ft. 8½ in. gauge was chosen.

The parochial policy adopted is further illustrated by the



number of lines which were built right up to State boundaries, and there stop short lest they should convey traffic from the hinterland of one State to the port of another. Lateral communication within the country is therefore difficult and, in the case of the areas remote from large cities, absent almost entirely; while in the interior of Queensland, in particular, there is no line, whatsoever, connecting the various railheads.

Although the delays to commerce and the strategic im-
 plications were serious, little was done to rectify this muddle until 1921, when a Royal Commission recommended the adoption of a 4 ft. 8½ in. gauge as the standard to be aimed at by the Commonwealth. This policy was later definitely approved by the Commonwealth Government and by the governments of the various States, with the proviso that the unification should be carried out in stages. The first stage, which is being carried out, will provide a through line of 4 ft. 8½ in. gauge from Fremantle to Brisbane along the existing routes, and will also convert the 5 ft. 3 in. gauge lines of Victoria and South Australia to this standard. It requires not merely alterations in the running gauge, but in the loading gauges as well; and this means heavy constructional work in connection with bridges, tunnels, buildings and platforms to permit of the use of broader and higher rolling stock on some of the sections.

Changes of Gauge

A scheme which was also considered by the Commission, and which will probably be carried into effect when the financial situation permits, is the joining up of the railheads in New South Wales and Queensland by a line which will eventually extend to Birdum in the Northern Territory, and thus give a much needed lateral communication in the interior, and a railway to Port Darwin from the South.

Lateral Communication

A proposal to remove the isolation of Port Darwin by a line from Adelaide was considered, and, as an initial measure, in 1929, the railway from Adelaide to Oodnadatta was extended to Alice Springs. It is proposed to extend this line at some future date from Alice Springs to Birdum along the route of the Overland Telegraph wire.

A South-North Line

The lack of adequate rail communications is to some extent counterbalanced by a progressive policy in regard to air

(3) Air Routes

routes. Map No. 12 indicates the extent and importance of these. Thus, an air line which operates the route Sydney-Charleville-Cloncurry-Camooweal-Daly Waters and Port Darwin (2,100 miles) provides some of the lateral communications which are lacking in the hinterland of Queensland; forms a link in the Imperial air route from England to Australia, and removes some of the isolation of North Australia. A route from Perth to Adelaide (1,500 miles) provides a faster service for mails between England and the south-east corner of the Commonwealth; and another, from Perth to Wyndham (2,100 miles), brings the scattered settlements on the west coast within touch of the chief centres of Western Australia. Over two hundred aerodromes and landing grounds exist and every large cattle and sheep ranch has some area where landing can be made in safety.

MAN POWER

The population of Australia is $6\frac{1}{2}$ millions.¹ Excluding the aboriginals, who number about 60,000, 99 per cent. of the population belongs to the white race, and over 97 per cent. is of British descent. It is therefore strikingly homogeneous in composition. Its distribution is equally remarkable. Although Australia depends mainly on agriculture, only one third of the population lives in the country. The capital cities alone, hold about 49 per cent; the provincial towns about 16 per cent.; and the country areas are peopled by less than 35 per cent. of the whole population. This concentration of the people mainly in the towns and cities has tended to create economic difficulties and a large unemployment problem.

But the most striking feature is the sparseness of the population contrasted with the area of the continent which it occupies. Even Victoria, which is the most densely populated part of the Commonwealth has only 20 persons to the square mile; New South Wales, the next most prosperous part, has 8 persons to the square mile; and taking the whole Commonwealth the density of population averages only about two people to each square mile.

¹ In 1936, 6,820,000 including 60,000 aborigines.

This sparseness of population has given rise to much controversy on two closely connected questions :—

(1) The capacity of Australia to hold a much larger population.

(2) The advantages and disadvantages of allowing coloured immigration into its tropical parts.

With regard to the first, it is now generally recognized that estimates of the future population of Australia, based purely on comparisons of its area with the United States or other countries, are not satisfactory. Almost one half of the continent has less than 10 inches of rainfall and is either desert or semi-desert (1,300,000 sq. miles). Probably another one million square miles are suitable only as pasture lands where herds of sheep or cattle can be fed, provided they move from place to place over wide areas, but where dense populations cannot be supported. Two hundred thousand square miles of the remainder are rugged and mountainous. Of the remaining 400,000 square miles only about one-fifth has a fairly heavy uniform rainfall. If these estimates are accepted, Australia shrinks to the size of France or Italy; and its capacity to hold a population of more than 30 or 40 millions is open to question. The population to-day is about 6½ millions; during the last forty years it has increased on the average by 18 per thousand per year and if this rate could be maintained it should reach the thirty million mark in less than 70 years from now.

There is, however, another aspect. It is agreed that much of the semi-desert area could be irrigated by artesian wells; and that the lack of communications, changes of gauge and the strenuous maintenance of unduly high social and industrial standards are retarding the development of the country. It is, also, generally accepted that there are areas of tropical Queensland and Northern Australia which are only undeveloped because their climate does not permit the white race to carry out the necessary pioneering work. It is therefore sometimes urged that these areas should be opened to immigration for coloured peoples of the Empire, who might perhaps be able to make them productive.

THE WHITE AUSTRALIA POLICY

Australia, for many years, has, however, definitely set its face against such a policy. Complete exclusion of all British or foreign Asiatics, except students, merchants or visitors in possession of passports, has been ensured by legislation. Thus, by the Immigration Act of 1901 "any person who fails to pass the dictation test; that is to say, who, when an officer dictates to him not less than fifty words in any European language fails to write them out" can be excluded, and this mode of exclusion has operated, as it was designed to do, chiefly against Asiatic immigration.

The language chosen is selected by the immigration officer and the test is thus "not so much a test of fitness for admission as a flexible method of exclusion. Difficulty in applying it has occasionally arisen in regard to undesirables of unusual linguistic attainments. In one such recent case recourse was had with success to Gaelic."¹

The policy of "a white Australia" has practically unanimous support from the Australian public. They base their case on the following grounds:—

- (1) Australia is increasing more rapidly in population than most countries of the world. Its progress cannot therefore be regarded as so slow as to provide an excuse for other lands, which may be densely populated, to demand that its gates should be flung open to them.
- (2) No assurance could be obtained that Asiatic immigrants, if allowed to enter the tropical parts, would be content to remain there and develop those parts. Indeed the probability is, to judge from past experiences, that they would tend to congregate where white pioneers had already broken the ground. Problems of mixed races, the franchise, and the lowering of industrial standards and wages would thus arise.
- (3) Every country has the right to determine the composition of its own population. No slight should therefore be felt by the coloured races of the Empire, if Australia exercises this undoubted right.

¹ *Australian Immigration Laws and their Working*, by A. H. Charteris: Proceedings of Second Conference, Institute of Pacific Relations. Gaelic was again applied in 1934 to keep out a visitor to Australia.

- (4) It has not been proved that coloured labour is more competent to develop rapidly the tropical areas of Queensland than the white settlers who are already there. Indeed, experience with Kanaka labour in the past seems to prove the contrary.
- (5) Asia, Africa and to a great extent South America, appear likely to be peopled in the future almost entirely by coloured peoples. It is therefore desirable that the three smaller continents, Europe, North America and Australia should be reserved for the white races.

It is clear, however, that while the preservation of Australia as a home for the white people is very important, particularly in view of the comparative proximity of the great reservoirs of coloured population in Asia, a strong title should be established by the effective development of its resources by a quickly increasing vigorous white population. The notable falling off in immigration from Great Britain to Australia in the post-war years, as compared with the three years before the war, is therefore very unfortunate. The various schemes initiated under the Empire Settlement Act of 1922 have not been completely successful. Thus the Group Settlement Scheme, by which groups of men or families who had some association of place or kindred in Great Britain were allotted areas in Western Australia and, under supervision, carved out farms from the virgin bush, has now been abandoned. It was found that the cost of paying these men for their labour, when added to the cost of the land was frequently more than the land was worth. Further, certain factors of a temporary nature, during recent years, have operated against a great flow of immigration. Capital for the development of communications, irrigation, etc., had been wanting; and markets for the commodities produced have suffered in the general depression. The high level of wages in Australia makes development of any kind expensive, and the growth of a large city and industrial population renders unemployment a constant danger. This last feature of Australia is very important, and very remarkable in a country whose chief wealth is agricultural. It has been seen that the capitals of the six states had in 1931 a combined population of over 3,000,000 as against a total population in the Commonwealth of 6,500,000. In fact, the

*The Progress
of White
Immigration*

urban population of Australia represents over 65 per cent. of the total, and less than 35 per cent. of the people are employed directly in agricultural pursuits. The fear of increasing this already over heavy town population is undoubtedly one of the causes which have prevented Australia from encouraging rapid immigration ; and this fear is apparently justified, at present, by the unemployment which exists and which has compelled the Australian Government to stop, at least temporarily, all Government assisted schemes of immigration from Great Britain.

THE DEFENCE RESPONSIBILITIES OF AUSTRALIA

Australian problems of defence are mainly naval. The population of the Commonwealth is so homogeneous and so largely of British extraction that the danger of internal disorder arising, of a nature sufficiently serious to constitute an "internal security problem," is insignificant. There is no land frontier to create a problem of defence against external attack by land. The land forces, which are maintained, must therefore be regarded as having four functions :—

- (a) To render such ordinary support to the Civil Power as is necessary in a civilized and generally orderly country.
- (b) To defend the coasts of Australia from attack, *i.e.*, as a second line to the Navy.
- (c) To come to the assistance of the Imperial forces, when Australia decides to participate in a war in which Great Britain is engaged.
- (d) As a member of the League of Nations, to carry out such obligations as may have been incurred under the Covenant of the League.

The Naval Problems

From Sydney to Liverpool, by the Suez Canal, is 12,235 miles ; to Yokohama it is only 4,375 miles. This is some indication of the naval isolation of Australia from the home bases of Great Britain and its comparative proximity to the home bases of Japan. Singapore, the Imperial base nearest to Sydney, is over 4,000 miles away or about the same distance as Yokohama ; while some of the islands of the Caroline Group (a Japanese Mandate) are only 2,000 miles from

Sydney. These figures disclose the nature of the local naval problems. They are concerned with the defence of the long coastline of Australia, and particularly of the base at Sydney, the coastal towns, the vessels in harbours or on local sea routes, against an attack made by a Navy whose main bases are as near as Singapore is and which has potential bases much nearer. Such attacks, which might be in the nature of raids by cruisers, would be the more likely to achieve a great measure of success and to cause disorganization because of the following :—

(1) The concentration of population, industries and resources in the ports of the south-east corner of the continent, viz., Brisbane, Sydney, Melbourne, Hobart and Adelaide.

(2) The isolation of the northern coastline, which has no rail communications with the base of man power and resources in the south.

(3) The lack of lateral communications by rail and road in the interior, and the frequent changes of gauge, which would hamper the movement of personnel and supplies to any threatened area.

But the wider problem of defence of the external sea routes is still more important. Though self-supporting in food supplies, Australia is vitally dependent on external sources for many essential manufactures and raw materials and for its supplies of petroleum. The breakdown of British naval power in the Indian Ocean would, therefore, place it in a perilous position, which measures of purely local protection could not mitigate. Hence, Australian naval problems cannot well be separated from those of Britain. Both are concerned in the protection of the sea routes to and in the Indian Ocean ; both would suffer if that protection was inadequate ; both must co-operate to avoid the dangers which would threaten divided action. It is for this reason that Australia has consistently urged the construction of the base at Singapore, and is developing Port Darwin as a link between Singapore and Sydney.

At the same time, however, there is, in Australia, a strong feeling in favour of placing more emphasis on purely local defence. The advocates of this policy argue that Australia

can never maintain a navy large enough to defend the sea routes of the country or even its coastline without assistance from the British Navy. Since that assistance might not always or immediately be available owing to serious troubles in the Mediterranean or elsewhere, they argue that coastal and air defences should be greatly expanded and that adequate reserves of essential war materials, such as petroleum, rubber, etc., not produced in Australia, should be kept in stock. This emphasis on local, as distinguished from Imperial, defence is reflected to some extent in recent Australian defence estimates which will be described in a later section. In particular, an expansion of the Royal Australian Air Force is to be carried out, not merely in Imperial interests, but because the speed and mobility of aircraft would enable them to reach much more quickly any part of the 12,000 mile coastline which was being attacked than either naval or land forces. A landing on Australian soil, in the face of determined air attack would, it is argued, be a most difficult and dangerous operation. Further, if this greatly expanded air force is to have the replacements which, in war, are so rapidly required, it is necessary that aircraft factories should be established in Australia and steps are being taken to ensure this.

THE DEFENCE FORCES

The policy of the Australian Government with regard to defence is to make the country capable of local defence, working in close co-operation with the Imperial defence forces. All the forces are controlled by a Ministry of Defence, which is assisted by Military, Navy and Air Boards, of which the President in each case is the Minister of Defence. There is also a Council of Defence, to co-ordinate the various arms and deal with policy in its wider aspects. The Prime Minister is, *ex-officio*, the President of this Council, which corresponds in a general way to the Committee of Imperial Defence.

The Navy

The Royal Australian Navy consists at present of two 10,000-ton cruisers, two older and smaller cruisers, a seaplane carrier, a sloop, a flotilla leader and several destroyers. Its base is at Garden and Cockatoo Islands, Sydney, where complete facilities for docking and repairs exist; and it has

defended fuelling ports at Port Phillip (Melbourne), Albany, Brisbane and Adelaide. There is a floating dock capable of taking 10,000-ton cruisers at Newcastle.

The supply of officers for the Royal Australian Navy is maintained by a Naval College at Westernport, near Melbourne. After the completion of a course at this institution, midshipmen are drafted to the Royal Navy for two years. Further liaison between the Royal Navy and the R.A.N. is obtained by a frequent interchange of officers, vacancies allotted at the Naval Staff College, Greenwich, etc.

In 1929, the military forces of Australia were constituted *The Military Forces* on a voluntary basis, and now consist of : (a) a permanent force, (b) the citizen force of Militia, (c) a Senior Cadet force.

The Permanent Force corresponds in some degree to the *1 Permanent Force* permanent staff attached to the British Territorial Army. It is organized to carry out command, administrative and instructional duties with the Citizen Force, and also to provide garrisons for naval bases, etc., and to form a nucleus of technical services.

The officers of the Permanent Force are known as the Australian Staff Corps, and are recruited through the Royal Military College, Duntroon. After passing out, they are first attached to a unit for a short period and are then sent to England or India for training with a British regiment. They pass the same qualifying examinations as British officers, and are allotted vacancies at the Staff Colleges and the Imperial Defence College.

All quartermasters and warrant officer belongs to the "Instructional Corps."

The total strength of the Permanent Force at present is about 1,600 officers and other ranks.

The Citizen Force, or Militia, is organized in 2 Cavalry *2 The Citizen Force* Divisions, 4 Infantry Divisions and 3 mixed brigades, but is very much under strength at present. Enlistment is voluntary, for three years (extendable thereafter by periods of one, two or three years), and is open to all suitable men over 18 years of age. The annual training period is 12 days (6 days at home, 6 days in camp).

Officers of the Citizen Force are promoted from the ranks. Each battalion and regiment has an adjutant and each brigade

has a Brigade Major from the Permanent Force. Battalions and regiments have several instructors from the "Instructional Corps."

The total strength of the Citizen Force is about 30,000 at present.

There are also Rifle Clubs with a total membership of 50,000, which fire an annual course.

3. *The Senior Cadets* A Senior Cadet Force for boys of 16 to 18 years provides a useful basis of expansion. They do 60 hours training in the year.

Some progress in mechanization has been made in the Australian Military Forces, and there is a small Citizen Force Tank unit. An effort has also been directed at making Australia self-supporting in supplies of munitions; and there is now a small arms factory at Lithgow, an ammunition and explosives factory at Footscray, and ordnance and explosives factories at Maribyrnong, all of which are under a Munitions Supply Branch of the Ministry of Defence.

The Australian Air Force

The Australian Air Force is quite separate from the Army, but is on somewhat similar lines, viz., it consists of a small Permanent Force (about 900 strong) and a Citizen Air Force (about 300). The system of training is based on that of the Royal Air Force, and officers of the Permanent Force are sent to England for courses of instruction. Vacancies are allotted to them, also, at the Royal Air Force Staff College. Some of the officers of the Permanent Force are officers who have transferred from the Australian Navy and Military Forces: others hold short-service commissions.

The officers of the Citizen Air Force are drawn from candidates who have had active service experience or who are otherwise suitable, and they undergo a four months' course during their first year and thereafter, if qualified as pilots, they do 25 days a year.

The Royal Australian Air Force has carried out a great deal of valuable air survey work, particularly in regard to the Great Barrier Reef; and it is also used for the provision of forest fire patrols. Its equipment is modern and is of the same types as are used in the R.A.F.

THE RECENT INCREASE IN AUSTRALIAN FORCES

The general feeling of insecurity arising out of disturbed world conditions has been reflected in Australia by an increased expenditure on defence. Thus, the estimates for 1936-37, which were the largest peace-time estimates in Australian history, allowed for considerable increases in all three services and also in the expenditure on coast and anti-aircraft defence. The strength of the permanent military forces will be increased to 23,000, chiefly in the staff for the Militia and in more coast artillery. Coastal armaments will be completed with extensions to Brisbane and Fremantle. The expenditure on the local manufacture of anti-aircraft guns and searchlights has been increased. Armament, equipment and reserves for the Field Army will be improved, including the continuation of mechanization, increased reserve stock of artillery and small arms, and the purchase of modern armaments and technical equipment. Three additional 8,000-ton oil tanks have been built at Darwin, making a total of nine, and two 12,000-ton tanks are being built in Sydney. The object of this is to provide an adequate reserve of petroleum in case of supplies being temporarily cut off.

Plans for Air Force expansion will provide three squadrons for co-operation with the Field Army instead of one, and also a squadron instead of a flight for naval cooperation, and five squadrons for co-operation with the fixed defences. Land aeroplanes will be substituted for flying-boats, enabling more aircraft to be purchased and local aircraft factories are being established.

While gas attack is improbable on the scale practicable in Europe, a light attack by a raider with aircraft is regarded as possible. Therefore the protection of large centres is considered necessary, without providing for the wholesale protection of the civil population. Money is also being spent on developing local munition sources and civil aviation.

The Navy too is being expanded, an immediate increase of 1 cruiser and 1 sloop being provided for, as well as the modernization of the 8-in. cruisers at present in commission.

DEPENDENCIES OF AUSTRALIA

Papua lies completely within the tropics, is mountainous, *Papua* with a narrow coastal plain which is generally low and swampy.

There are many excellent harbours, the most important of which are Port Moresby (the capital), Samarai and Daru. Steamers trade between Sydney and Port Moresby, and the most important river, the Fly River, is navigable for many miles in smaller boats. The chief exports are copra, gold, hemp, pearls, osmiridium and rubber, but development has been slow owing to the climate, and difficulties of transport. Indications of petroleum were found over a large area, and the Anglo-Iranian Oil Company conducted boring operations in these places on behalf of the Commonwealth Government, but without success.

The Territory of New Guinea

Immediately after the outbreak of war, an expedition from Australia occupied Kaiser Wilhelm Land, and, by the Treaty of Versailles, a mandate for the territory was given to His Majesty on behalf of the Government of the Commonwealth. The regions so conferred on Australia were the mainland (Kaiser Wilhelm Land), the Bismarck Archipelago, and the Solomon Group.

The mainland consists of a narrow but very fertile strip, with a mountainous and well-wooded interior, much of which still remains to be explored. The most important harbours are Madang and Alexis Hafen. Minerals are plentiful in the interior, but are not yet produced in any quantity owing to difficulties of transport. Traces of oil too, have been found, but a thorough examination by the Anglo-Iranian Oil Company in the basin of the Sepik River has not been encouraging. There are no railways. Practically all the trade is with Australia, and at present consists mainly of exports of copra.

Civil aircraft are now usefully employed in both Papua and New Guinea for the transport of mails, food and materials to the mining fields in the interior, which are thus brought within an hour's journey of the coast. (Previously in many cases the carriage of these entailed a fortnight's journey.)

Norfolk Island

Another dependency of the Commonwealth is Norfolk Island, 930 miles from Sydney and about 400 miles from New Zealand. It is important because the "all-red" cable from Great Britain *via* Vancouver, Fanning Island and Fiji passes through Norfolk Island, and there separates into two lines, one to New Zealand and the other to Brisbane.

THE DOMINION OF NEW ZEALAND

New Zealand is the most isolated of all the British Dominions. The nearest land of importance in its vicinity is Australia, over 1,000 miles away. In other directions lie the empty southern Pacific and the frozen lands of the Antarctic continent. Though the Panama Canal has brought its ports somewhat nearer to Great Britain than are Melbourne and Sydney and has assisted its development to some extent, it still suffers from the handicap of remoteness from the great markets of the world. Its progress and its defence problems are closely related to those of its immediate neighbour, the Commonwealth of Australia.

New Zealand, like the British Isles, consists of two large and a number of smaller islands. The two largest, the North Island and the South Island are separated from one another by Cook Strait, a waterway, which facilitates communications that otherwise would be difficult. The South Island is separated from the third and minor partner, Stewart Island, by Foveaux Strait. Other territories under the control of the Dominion are the Auckland, Campbell, Chatham, Antipodes, Bounty and Kermadec Islands, the Ross Dependency, and the mandated territory of Western Samoa. The North and South Islands are extremely mountainous, the trend of the highlands running from north-east to south-west, and the coastal plains form only a very small percentage of the total land area. The most important of these plains are the Canterbury Plains, round Christchurch, and the plains round Dunedin and Port Chalmers.

New Zealand, like Great Britain, lies in the west wind belt. The prevailing wind is warmed by southern equatorial currents and carries warmth and moisture landwards. When these warm moist winds rise to cross the highlands the moisture is condensed, and much rain is precipitated on the western side of the islands which receives in places as much as 100 inches. The east is dryer, but its rainfall which is about 30-40 inches, is greater than that of Great Britain. Owing to the latitude of the country, which is approximately the same as that of Italy, New Zealand is warmer than England, and the climate, by reason of its insularity, is always temperate. Every form of agriculture which flourishes at home can flourish

*Physical
Features of
New
Zealand*

Climate

there, and life perhaps produces fewer new problems for the immigrant to solve than is the case in any of the other Dominions.

*The Harbours
and chief
towns*

The four most important harbours and towns are as follows :

Auckland (217,000), the chief town and port of the North Island, is on the isthmus between Manukau Harbour and Hauraki Gulf. The isthmus is so narrow that the town has harbours on the east and west coast, and commands all railway traffic from the north to the south. Auckland is the base of the New Zealand Division of the Royal Navy.

Wellington (143,000), the capital of the Dominion, lies at the southern end of North Island, on Cook Strait, and possesses the magnificent land-locked harbour of Port Nicholson.

Christchurch (127,300), at the centre of the Canterbury Plains, is eight miles from the sea, and has, as its port, Port Lyttelton. Routes from north and south along the plain meet here, and it is the natural depot for the important export trade in frozen mutton, dairy produce and wheat.

Dunedin (86,500), an important coal port and manufacturing centre, has a large export trade of sheep reared in the Otago basin. Other ports of importance are Napier and Plymouth in the North Island, and Nelson, Greymouth, and Invercargill in the South Island.

*Mineral
Resources*

The coal supply, obtained chiefly round Westport and Greymouth, is sufficient for requirements and a little is exported, but, as in the case of Australia, iron and steel are imported, chiefly from Great Britain and the United States. Oil has been prospected for, without any marked commercial success, though traces of it have been found in many localities.

*Agricultural
Resources*

New Zealand is chiefly an agricultural country and is the greatest exporter of mutton (frozen) in the British Empire, but the exports of wool and butter are both of greater value than the exports of mutton. Cheese, sheep skins, agricultural produce, tallow, phormium flax and kauri gum are also exported.

Eighty per cent. of New Zealand's exports go to Great Britain and 50 per cent. of its imports are obtained from Great Britain, the other chief markets and sources being the United States and Australia.

Population

The population consists of 1,455,000 persons of European stock (and practically all of British extraction), and about

69,000 Maoris. The latter, unlike most Polynesian races, are steadily increasing. No colour or racial problem, however, confronts the Dominion. After the fierce clashes which took place in the Maori wars, both Maoris and Europeans sank their differences and have shown their ability to co-operate with one another.

The defence problems of New Zealand are similar to those of Australia, and it has shown a practical interest in the construction of the base at Singapore by contributing £125,000 annually for eight years towards its cost.

Defence Problems

THE DEFENCE FORCES OF NEW ZEALAND

The Defence forces of New Zealand are under a Ministry of Defence (which is combined with the Ministry of Justice under one Minister).

The Dominion makes no claim to have her own fleet, and ships of the New Zealand Division are referred to individually as H.M.S. and collectively as the New Zealand Division. In time of war the ships are at the disposal of the British Government.

Naval Force

The base is at Devonport, Auckland, on the north side of the Waitamata, the finest harbour in the Dominion. Large sums have been expended on the dockyard in order to make it suitable as a repair and maintenance base for such ships as may comprise the New Zealand Division in the future. All ordinary repairs can be carried out, but there are no facilities for more specialized or technical work.

The Division consists at present of a training ship, the *Philomel*, two cruisers lent by the Imperial Government and maintained by New Zealand and two sloops. Officers for service with the New Zealand Division are lent from the Royal Navy for a period of three years, but approximately half the seamen and stoker ratings borne in the two cruisers are New Zealand entries who have been trained in *H.M.S. Philomel* at Auckland.

The New Zealand Military and Air Forces are under a General Officer Commanding.

Military and Air Forces

The Military Forces consist of :—

	<i>Average Strength (approx.)</i>
(a) The Permanent Force (Administrative and Instructional)	600
(b) The Territorial Force	12,000
(c) Cadets	34,000
(d) Defence Rifle Clubs—Membership ..	4,000

All officers of the Permanent Force now enter through Sandhurst, Woolwich or the Royal Military College of Australia; they are required to pass the War Office promotion examinations, and are allotted vacancies at the Staff Colleges. Junior officers are, from time to time, posted to the Indian Army for a two years' tour.

The Cadet and Territorial Units are officered solely by Territorial officers, Permanent officers providing the instructional and administrative staff, including the adjutants of brigades of artillery, of regiments, of battalions and of depots.

The Territorial Force is now based on a principle of voluntary service (but compulsory enlistment can be applied without special legislation) and is at present limited, owing to the cutting down of expenditure, to all men of Territorial age (18-24) in such centres as the reduced strength of the Instructional Staff can reach. Service at present is for 3 years. The force is organized in one Division, 3 Mounted Rifle Brigades, 3 Field Artillery Brigades with a due proportion of other arms, and the obligatory course of instruction consists of 30 hours training before camp and 6 days camp each year.

Air Force There is a small Permanent Air Force cadre which administers and instructs a Territorial Air Force of 4 squadrons. The Air Force Base is at Auckland. The New Zealand Air Force is at present being reorganized and increased (1937) by the addition of two flights of torpedo bombers and one flight of coastal reconnaissance machines for defence against naval attack.

Nauru Nauru or Pleasant Island, which was a German possession just south of the Equator, was mandated to the British Empire and is administered—by agreement between Great Britain, Australia and New Zealand—by Australia. It is valuable on account of the quantity of rock phosphates which the island possesses, and which is estimated

as amounting to 50,000,000 tons. The phosphate on the island, as well as that on Ocean Island, about 165 miles further east, was worked prior to the war by the Pacific Phosphate Company, but in 1919 the company's interests were bought by the British, Australian and New Zealand Governments for £3,500,000, the purchase price being contributed in the proportion 42 : 42 : 16 on the understanding that the three countries should receive the output in these proportions. There is a long range wireless station at Nauru, built by the Germans.

CHAPTER XV

THE UNION OF SOUTH AFRICA

Situation

THE Union of South Africa consists of the Cape of Good Hope Province, Natal, the Orange Free State and the Transvaal, and holds a mandate for the territory of South West Africa. The area of the Union is 472,000 square miles, of South West Africa is 323,000 square miles, and their combined territories occupy so much of the peninsula of South Africa that they have over 1,500 miles of coast on the Atlantic and more than 700 miles on the Indian Ocean. The ports of the Union, therefore, are the only ones available for some 2,000 miles along one of the great sea routes of the world ; and this fact, combined with the fortunate possession of ample local resources of coal, suitable for bunkering ships, gives it a commanding position on the Cape Route to the Indian Ocean.

In peace time the flow of trade by this route between the Indian and Atlantic Oceans is considerable and in the case of Australia particularly important. The Cape route from Great Britain to Australia is only 1,000 miles longer than the Suez Canal route, and hence is largely used by vessels travelling between these two countries, which are not sailing to a fixed schedule, which do not carry perishable commodities, and which desire to avoid the high Canal dues. In time of war its importance would be greatly enhanced, particularly if the Mediterranean were closed to normal trade, for it would then be the chief line of communication between Great Britain and that large part of the British Empire which lies round the Indian Ocean. Under such circumstances, its value would be all the greater, because it is an ocean route where submarine attack would be less successful and one which would not be closely flanked by the bases of any other great naval Power.

Physical Features

The territory of the Union of South Africa consists mainly of a great plateau (the veldt) 3,000-7,000 feet above sea

level, highest on its eastern margin, lowest in the west and north, and separated from the coast by a narrow lowland. In the south-west corner the ascent from the coastal lowland to the veldt is broken by parallel ranges between which lie narrow tablelands or terraces known as Karoos. Thus, the Little Karoo lies near and parallel to the south coast and is about 1,500 feet above sea level; beyond it to the north, and lying between the Groote Zwartebergen in the south and the Nieuwveld and Sneeuwbergen in the north, is the Great Karoo, about half the area of England and situated at an average altitude of over 2,000 feet. On the eastern side of the peninsula, in Natal and Cape Colony, the rise from the coast to the veldt is not by a series of terraces, but is a gradual slope, broken suddenly by the high hills which form the edge or escarpment of the veldt. These hills commence near the Tropic of Capricorn and run southwards, through Natal, where, as the Drakensberg mountains, they rise to over 10,000 feet. From the south-west end of the Drakensberg they swing westwards to become merged in the parallel ranges north of Cape Town, such as the Sneeuwberg and the Nieuwveld, and then turn northward as a line of low hills, broken by the Orange River and its tributaries.

The interior plateau or veldt varies in height from about 7,000 feet, at its eastern margin in Basutoland, to 3,000 feet near the west coast of Cape Colony, and is a vast undulating country with occasional solitary rounded or pointed kopjes.

The eastern and southern coasts of South Africa, being warmed by winds blowing over the Mozambique current, never have a low temperature; the west coast being cooled by the cold Atlantic currents, is never very warm. The central plateau, on account of its height and remoteness from the sea, is subject to marked variations in winter and summer.

South Africa lies in the region of the South-East Trades which blow across the warm currents of the Indian Ocean collecting moisture. When these winds rise to cross the eastern escarpment, the moisture is condensed, causing regular rainfall, and giving rise to short rapid rivers, such as the Tugela, which run down from the escarpment over the narrow coastal region to the Indian Ocean. Beyond this escarpment the rainfall gradually diminishes as the moisture is removed

Climate—
(a) *Temperature*

(b) *Rainfall*

from the air, until it falls to 5-10 inches in the neighbourhood of the Kalahari Desert, and to less than 5 inches at the north-western corner of Cape Colony. The south-western corner of the country, however, lies in a region of winter storm winds blowing from the Atlantic, and Cape Town, and the region immediately around it, are subject to considerable rainfall in the winter months.

*Resources .
Agricultural*

The coastal region, with moderate rains, produces wheat, maize, sugar, tea and Mediterranean fruits. Further inland from the south, the Karoos have a rainfall of 10-15 inches ; the ground is fertile, but, owing to prolonged periods of summer drought, large areas are burnt to a desert in the hot months, and are only suitable for sheep pasture, goats, and ostrich farming.

On the veldt the rainfall varies from 35 inches at its western side to less than 5 inches at the edge of the Kalahari Desert. The rain comes mainly in the summer and growth is then luxuriant ; in the winter, only coarse grasses can thrive, growing in tufts and showing the bare earth between. Sheep and stock farming are therefore here, as on the Karoos, the most important industry apart from mining, and agricultural development depends largely on the success of irrigation schemes, a number of which are under construction or projected.

Minerals

The mineral resources of the Union are very great. In the Cape there are the diamond fields of Kimberley and copper mines at O'okiep near Port Nolloth ; in Natal the important coalfields of Newcastle and Dundee produce most of the coal used for bunkering ships at Cape Town and Durban. The Orange Free State has diamond fields along the Orange River and some coal at Kroonstad. In the Transvaal, the Rand, a narrow ridge about sixty miles long, is the chief gold producing area in the world and coal is mined close by Johannesburg at Witbank. There are also great areas in which iron ore could be mined but these are not worked on a large scale at present.

Trade

The chief exports in order of value are gold, diamonds, coal (for bunkering), wool, hides and skins, maize, sugar and mohair. Nearly 60 per cent. of these go to Great Britain and over three-quarters of the total go to the British Empire.

The chief imports are manufactured products, machinery and cotton goods, 60 per cent. of which come from the British Empire and almost 50 per cent. from the United Kingdom. There are no arsenals or military equipment factories in the Union, and petroleum in paying quantities has not been discovered.

COMMUNICATIONS

The regularity of the sea coast of South Africa is one of its ⁽¹⁾ *Harbours* most noticeable features. It is broken by few inlets and on the east and west consists of sand and sand dunes; and on the south generally of precipitous cliffs. The only harbours of importance in the whole region are Walvis Bay (South-West Africa), Cape Town, Simonstown, Mossel Bay, Port Elizabeth, East London and Durban.

Walvis Bay: The importance of Walvis Bay was mainly strategic when the Germans occupied German South-West Africa. Its commercial importance now lies in its position at the apex of a triangle of comparatively fertile country, occupying the centre of the arid regions north of the Orange River. An air route from Walvis Bay to Johannesburg and Durban may greatly increase the importance of this harbour which may become a port of call for the vessels carrying mails to and from England.

Cape Town (6,181 miles from London), is the first port of call in South Africa used by all vessels trading between Europe or America and Australia. In addition to the re-victualling of ships, coal bunkering is one of its important functions, the coal being brought round the coast from the neighbouring province of Natal.

Simonstown, on the sheltered bay in the north-west angle of False Bay, is the naval base and dockyard of the Imperial Fleet in these waters. The docks consist of a tidal deep water and graving dock, together with all equipment for repairing and refitting. They are not available for commercial purposes, and are controlled and defended by the Union of South Africa.

Port Elizabeth, on Algoa Bay, 423 miles from Cape Town, is an important wool centre. The harbour facilities have been greatly improved and a breakwater has been constructed. Further developments have also been planned.

East London lies at the mouth of the Buffalo River, 131 miles from Port Elizabeth and 559 miles from Cape Town.

Durban or Port Natal, 253 miles from East London and 812 miles from Cape Town, is the most important port both in volume of trade and in facilities; it lies on a land-locked lagoon, with an entrance which has been cleared of sand, and is now practicable at all tides for the largest ships trading in the southern hemisphere. There is deep water along the quays and the accommodation is sufficient for any but the largest battleships. It has a floating dock and a large graving dock, capable of taking cruisers.

- (2) *Railways* The South African railways are with a few exceptions Government owned and managed. Their normal gauge is 3 ft. 6 ins. and the lines run from the ports already enumerated to the interior.

MAN POWER AND RACE PROBLEMS

The European population of the Union of South Africa was 1,827,000 in 1931.¹ Of this total about 950,000 were of Dutch extraction and about 850,000 of British descent. No census was taken, at that time, of the non-European population, but it is estimated as being about 7 millions, of which over 160,000 are Indians and the remainder are chiefly Bantus and Cape Coloured (in Cape Colony). The white section of the population is therefore outnumbered at present by the coloured peoples by about four to one.

The Dutch The Dutch section, consisting of more than half the whole white population, has memories of an independence lasting for a century, and stoutly and skilfully maintained. Nevertheless, having become part of the British Commonwealth in 1901, it gave a loyal support to the Empire during the war, and South African forces fought in German East and South-West Africa. After the war a tendency towards the growth of separatist ideas was noticeable and, for a time, was crystallized in a controversy about the adoption of the Union Jack as part of the new flag of the Dominion which was being designed. The Imperial Conference of 1926, however, did much to dispel the feeling that the British Government desired

¹ In 1936 there were 2,004,000 Europeans and 7,585,000 non-Europeans.

to retain some residuary powers of control which would limit the practical independence of Dominions, and it was soon realized that Dominion Status henceforward gave independence in self government with the added security of a great combination of free nations. Further, any tendency towards internal differences between the inhabitants of Dutch and British stock has been lessened in a general effort to solve a problem of the utmost importance to all the whites in South Africa—the problem of maintaining the white ascendancy there in the future.

The native African peoples in the union fall into two main groups. The first of these is composed of the Cape Coloured who number nearly one million and who contain racial strains from the Hottentots, from slaves imported from the Dutch East Indies, and perhaps some small admixture of white and Bushmen blood in certain cases as well. Their languages are debased forms of Afrikaans and English; their religions, of Christianity and Mohammedanism. They provide most of the domestic and manual labour in the Cape, have no cultural or religious unity, are of poor physique and morale, and are specially susceptible to political propaganda, communism and crime. Up to the present, those male adults who have the requisite property qualification, and are able to read and write, have had the franchise, though they are not entitled to be members of Parliament.

*The Native
Africans*

The second group is composed of the Bantu peoples, such as the Basutos, Zulus, Bechuanas and Swazis, who number about 5½ millions, are physically superior to the Cape Coloured, but, on a mental plane, are still only a little stage above savages. Many of these are under tribal control by their own chiefs in tribal reserves, but economic pressure and the attraction of a higher standard of living, have drawn large numbers to the mining centres where they are temporarily employed, living in jail-like compounds; and from which they eventually return to the tribal reserve with their savings. Others, who are completely detribalized, provide most of the unskilled and semi-skilled labour on the farms and in the towns of the Union outside Cape Colony. These detribalized Bantus number in all about 3 millions, and are gradually advancing in skill, knowledge and political interests. Although the whites are in-

creasing at a greater rate than these various African peoples at present, the improvement in hygiene and sanitation among the natives is tending to produce a decline in their death rate, and thereby to perpetuate the already overwhelming superiority in numbers which they possess.

Two serious issues arise from the preponderance of black population and its gradual advancement in knowledge. The first, an economic issue, is the replacement of white labour by coloured labour in many fields of activity. Manual work, practically speaking, is no longer done by the white and he has become almost entirely a supervisor or organizer. This is due to the fact that the entry of coloured artisans into the various trades means that wages fall to the coloured level, and the white man must either work for a wage on which he cannot live up to a European standard, viz., he must become a "poor white," or else he must be unemployed and become a poorer one. Consequently, as the native African becomes better educated and enters trade after trade, his white competitors must withdraw or "reduce their standard of living to a level which would lead to ultimate demoralization." The white population, therefore, tends to become an "overseer class," limited in numbers and opportunities, and immigration declines till the balance of immigrants over emigrants dwindles to nothing. The inevitable result of this condition of affairs would appear to be that South Africa, in spite of a temperate climate, cooled by sea winds and a great interior plateau—conditions favourable to the growth of a vigorous white people—is likely to have a future preponderance of native and coloured people greater even than at present.

The second issue is political. The increase in education among the natives must tend to produce a desire for political representation, particularly when they have reached a stage at which they provide not merely the manual labour but most of the semi-skilled and some even skilled labour of the country. Up to now, in Cape Colony, some natives have had the franchise, and the only discrimination against them is a restriction on the sale of alcoholic liquor or firearms to or by them. But, in Natal, the Transvaal and the Orange Free State, they have had no vote. It is difficult to believe that with the spread of education their views can continue to be unrepres-

sented. Yet, on the other hand, if the overwhelming majority of natives at some future date were to receive the franchise the political power must pass to them for ever, the white residents would not be able to protect their own interests, and the maintenance of South Africa as a European Dominion could hardly be assured.

From time to time various suggestions have been made for dealing with these pressing South African problems. One is the segregation of the Bantus to specified areas in the Union ; another is the reservation of certain trades to the white man. With regard to the method of segregation, its advocates have urged that it is already applied in large areas. Thus, whites are excluded from residence in Basutoland, which is reserved for native settlement only, and large parts of the Transkei Territory in the north-east of Cape Colony are similarly reserved. Various extensions of this method, by which the greater part of Natal, Zululand, Swaziland, and Basutoland, together with the Transkei territories would be native reserves, in which all natives must live, and where they could develop their own tribal institutions, have been suggested. Though difficult and expensive to initiate, this would, it is argued, prevent the intense economic and political rivalry between whites and blacks which, otherwise, would appear to be approaching. As Basutoland and Zululand are already fairly densely populated, it would necessitate the opening of other areas as native reserves.

The other suggestion is less drastic. It is the restriction of certain occupations and trades in some districts of South Africa to white labour, with similar restrictions in favour of native labour in other areas. Such a method could be gradually enforced trade by trade, so as to effect the minimum dislocation in industry and it might perhaps secure a firmer position for white labour, while avoiding the difficulties inherent in the first method of moving large blocks of population from one part of the country to another. But though it might help to solve some of the economic problems, it is difficult to see how it would affect the problem of the franchise in the future.

After long consideration of these problems and of various possible methods of dealing with them, a joint select committee

*Recent
Legislation*

of the South African Parliament recommended in 1935 the passing of two bills, a Native Lands and Trust Bill and a Natives Representation Bill. The first of these, which has now been passed, adopts the principle of segregation as its basis. Certain areas of the Union are to be set aside for Bantu settlement in which they alone can acquire land and in which they can settle with the assistance of a Parliamentary loan of £10 millions. These areas, together with the existing reserves, would allot to the Bantus about 12 per cent. of the whole area of the Union and will include much valuable agricultural land. At the same time various restrictive clauses will ensure that in the other parts of the Union Bantu smallholders or "squatters" will be gradually squeezed out from the areas where the white man is to have undivided opportunity.

The second bill, the Natives Representation Bill, has also been passed. It allows the Cape Bantu to retain the vote but on a much restricted and communal basis. Otherwise it has swept away all hope of the ordinary franchise outside Cape Colony. The Bantu in the Four Provinces, voting communally, can return a few Europeans to the Senate. The Bantu communities are to elect twelve natives to sit on an Advisory Council with five European officials and four nominated natives. This Council will meet annually to offer suggestions to the Government and to pronounce their views on any legislation affecting them, but it will be merely advisory and will have no legislative powers.

Both of these Acts have been subjected to much criticism by conferences of Bantu chiefs and by some Europeans as well, as inadequate and unjust, and as shutting and barring the door against the political and economic advance of the Bantu. On the other hand, however, they have received the support of the vast majority of Europeans and are at least an attempt to establish a line of advance towards the solution of an ever-growing problem. The difficulties, economic rivalry, colour prejudice and political apprehensions, are very great, and a consistent and progressive policy which will safeguard the interests of both whites and Bantus in South Africa has perhaps been brought a little nearer.

Associated with these problems is the future of the three

British Protectorates, Basutoland, Swaziland and Bechuanaland.¹ These territories are ruled by native chiefs who have treaty relationships with the Crown and are supervised by the High Commissioner for South Africa. They are closed almost entirely to European occupation, and out of their total population of 800,000, only about 5,000 are whites. Their situation, however, and the fact that they supply much of the labour for South African mines, bring them within the ambit of South African affairs, while their lack of development is a source of irritation to the more efficient whites. For some time past, the Union government has shown a desire to take over the control of these Protectorates. In favour of this step, it is urged that geographically, racially and economically they are part and parcel of South Africa, and that no solution can be found to the South African native problems, without including them. On the other hand, native opinion in the Protectorates is strongly opposed to the transfer on the grounds that the native policy in the Union is not generous or sympathetic or even just,² and it seems hardly possible for Great Britain to divest itself of its treaty responsibilities to the native chiefs and to hand them over to the Union without their consent.

The Indian in South Africa provides another problem. Though the connection of Indian merchants with ports in East Africa has been maintained for several centuries, no Asiatic immigration into South Africa took place until 1860 when Indian labourers were brought to Natal to work on sugar plantations there. In 1870, there were only 6,500 Indians in South Africa; to-day, there are over 160,000, most of whom are the descendants of immigrants from India. Living on a lower scale of life than the European, they are able, as small traders and artisans to undersell the European. With their growth in wealth they have become increasingly desirous of full political rights and very sensitive of any attempt to differentiate between them and Europeans. An effort, for instance, in 1925, to restrict them to certain areas in each town, and to prevent them from moving to other parts of the Union on the grounds that they did not conform to

¹ Though generally referred to as the "three Protectorates," Basutoland is designated a Colony.

² South Africans deny this; on the ground that what the natives happen to prefer is not necessarily in their own interests in the long run.

*Proposed
incorporation
of the
Protectorates*

*The Indian
in South
Africa*

European standards of living and that their mode of life was insanitary, provoked much feeling among them and was used by certain sections in India as an illustration of the worthlessness, to coloured races, of British citizenship. The Bill which had been proposed (The Areas Reservation Bill) was withdrawn in 1926, and a conference of Indian and South African representatives was held in Cape Town (December 1926). Later, a travelling commission of Indians visited South Africa and a South African Commission visited India. As a result of these measures, a better feeling became evident and a special Indian Agent was appointed in South Africa, at the request of the Union, by the Government of India. It was recognized that Indians in South Africa should be enabled to live up to a western standard or else repatriated (if such a word can be applied to a second or third generation) free of cost to India. Since then no reservation schemes have been applied, and the desires for fuller political and economic privileges are under consideration, though there is still a strong feeling among many sections of the white population against conferring them.

THE DEFENCE RESPONSIBILITIES

It is evident from the previous section that internal security problems, which flourish most easily in countries where the population is not homogeneous in race or standard of life, may take an important place among the future defence problems of the Union. The presence of great mineral wealth in its most portable form is likely to attract undesirable persons; labour troubles of a serious nature occasionally break out in the Rand and other mining areas, and these factors, combined with the enormous native population which is already advancing towards a stage when a demand for political rights and recognition is becoming vocal, make the maintenance of internal security an important responsibility of the Union's defence forces. The great distances between important centres, the consequent length of communications and the isolation of the whites outside cities and towns are circumstances which have a bearing on the discharge of this responsibility.

External attack has, in the past, been regarded as unlikely.

The only foreign territory contiguous to the Union of South Africa is Portuguese. By sea, South Africa is separated from European naval and air bases by over 6,000 miles and from the bases of Japan by over 7,000 miles, and an attack on its ports or coasts could only be accomplished in the event of a general breakdown of British power in the Atlantic or Indian Oceans.

Recent events, however, such as the breakdown of collective security, the impotence of the League in the face of aggression, the growth of imperialistic and aggressive policies in Europe and Japan, the demand for colonies and the apprehension that Africa may become the scene of renewed colonial aspirations, the propaganda for the return of South-West Africa to Germany and the realization that the Union itself with its small white population and enormous mineral resources, particularly of gold, would be a valuable acquisition for any Power, have led to a greatly increased stress on the need for local defence. This, as will be seen in a subsequent section, has resulted in a five-year programme of expansion for the South African forces.

The defence of the Union's communications is important from both a local and an Imperial standpoint. South Africa is dependent on its sea communications with Great Britain for most of its requirements in manufactures and machinery, and its most important markets are in the United Kingdom and Western Europe. Some 11 million tons of overseas shipping and about 13 million tons of coastal shipping enter and clear at its ports annually, and any serious disturbance of this external trade would be disastrous. From an Imperial aspect, the Cape route may well be, in some future war, the vital line of communication to the Indian Ocean, and the security of Cape Town, Simonstown and Durban is therefore a matter of the utmost strategic importance. Indeed the co-operation of South Africa would be vital to Great Britain should the increased use of the Cape route become essential, and the recent modernization of the defences and equipment at Simonstown is therefore very welcome.¹

Though no forces are maintained in the Union for the

¹ During the last 7 years nearly half a million pounds have been spent on Simonstown.

specific purpose of providing a contingent to an expeditionary force in some Imperial crisis, circumstances may arise where the government may decide to participate; and this possibility must therefore be taken into account as part of the defence responsibilities, as must also be the fact that the Union of South Africa is a member of the League and might be involved in a League war. As a recruiting base, it is more centrally situated, relative to the chief Imperial commitments which are in the Atlantic and Indian Oceans, than any other part of the British Empire.¹

THE DEFENCE FORCES

By the South Africa Defence Act, 1912, as amended in 1922, "every citizen (European) shall be liable between his seventeenth and his sixtieth year (both included) to render, in time of war, personal service in defence of the Union in any part of South Africa, whether within or outside the Union."

By this Act, the Union Defence Forces comprise a South African Permanent Force and a Citizen Force. The executive authority over these forces is vested in a Minister of Defence who is advised by a Defence Council, corresponding roughly to the Committee of Imperial Defence.

The Permanent Force

The South African Permanent Force is a small regular force based on a method of voluntary enlistment for a period of three years, with re-engagement by two-year periods up to a maximum age limit. It consists of the following:—

- i. A Staff Corps which directs organization, supervises training and acts as instructors at the Military College at Roberts Heights, Pretoria.
- ii. Three Batteries of South African Field Artillery.
- iii. The South African Air Force, which consists of an active service squadron, flying training school and aircraft depot, is all stationed at Roberts Heights. Landing grounds have been prepared throughout the Union and any point can be reached by air in less than one day.
- iv. The South African Permanent Garrison Artillery which is responsible for the defences of Cape Town and the Royal

¹ Distances from Capetown. Southampton, 6,000; Bombay, 4,600; Fremantle, 4,700; Singapore, 5,000; Halifax, 6,400.

Naval Dockyard at Simonstown, and carries out instructional duties with the Coast Garrison Force.

- v. The South African Naval Service, which possesses two minesweeping trawlers and a hydrographic sloop, and is commanded by an officer on loan from the Royal Navy. Its chief function is to train volunteer minesweeping flotillas at the coastal towns, so that, in time of war, these volunteers can be responsible for maintaining clear approaches to the South African harbours.
- vi. The South African Instructional Corps, which consists of warrant and non-commissioned officers, provides the instructional staff for the Citizen Forces and for the small arms and signalling courses at the Military College.

In addition to the above, there are a special service battalion, a pioneer battalion, recruited from young unemployed men, as well as the nuclei of technical and specialist services, and also there is the South African Military College, Roberts Heights, which combines in one establishment a cadet college, a staff college, a small arms school and a signalling school.

The total strength of the whole Permanent Force is about 130 officers and 3,800 other ranks.

All citizens are required to register themselves on attaining the age of seventeen years, and may then volunteer for service, for a period of four years, with the Citizen Force. The Defence Act contains powers to make such service compulsory, but these powers are not normally used, as the flow of voluntary enlistment is sufficient to maintain units at their authorized strength.

In addition to the above, there is the National Reserve which includes all the remaining European males up to 60 years of age who are not enrolled in any of the above; and there are also school Cadet Corps which receive training in drill and miniature rifle shooting.

The unsettled world condition has led to a programme of considerable expansion in these forces. The South African Government has announced that in five years' time, South Africa will have ten batteries of artillery and six infantry brigades—a total peace strength of 15,000—which can be increased within three months of mobilization to 55,000 trained men and by another 99,000 riflemen if required. An

anti-tank battalion capable of being moved by air and equipped with the latest weapons will also be formed. The facilities at Cape Town and Simonstown are to be greatly expanded. There is also to be an increase in the South African Air Force.

*Defence
Policy*

Though no forces are specifically maintained for the purpose of Imperial as contrasted with local defence, the Union of South Africa trains, equips and organizes its forces broadly on similar lines to Great Britain and the other Dominions, so that if it should decide to participate in operations outside South Africa, its forces would be able to take part with as little disorganization as possible. In order to ensure uniformity of doctrine, a system of interchange of Imperial and South African officers has been established; and vacancies are allotted to Permanent officers from the Union at the Army and Air Force Staff Colleges and also at the Imperial Defence College. A good deal of stress is laid on the training of all regular officers in flying and the development of air communications in the Union as the best method of dealing in so large a territory with the outbreak, at remote places, of serious internal trouble; and over a hundred aerodromes have been established in various parts of the country. Boer and British military traditions are fused as well as possible in the Citizen Forces. All officers and N.C.O.'s of the Defence Forces are instructed in giving and understanding words of command in the two official languages of the Union, Afrikaans and English.

CHAPTER XVI

BRITISH POSSESSIONS IN EAST AND WEST AFRICA

THE Continent of Africa is remarkable for the general simplicity of its geographical features. A vast tableland, bordered by a coastal plain, occupies almost its whole area. This tableland averages 1,000-2,000 feet above sea level in the north and west, and 3,000-5,000 feet in the east and south. On its western and northern sides the transition to the coastal plain is generally gradual; in the south and east, terraces and escarpments frequently mark the edge of the plateau. There are, therefore, few regions on the northern or western sides which have the altitudes to be found on the High Veldt in South Africa or on the eastern plateau of Central Africa, and nearly all the great rivers flow towards the Atlantic and Mediterranean.

*General
description
of African
Continent*

In East Africa, the uniformity of the tableland is broken by two gigantic fractures. The eastern of these runs roughly parallel to the coast and about 300 miles inland, and is the great "Rift Valley," which extends along the earth's surface from northern Rhodesia to Palestine, and is marked by Lakes Nyasa, Natron, Naivasha and Rudolf, the Red Sea, the Gulf of Akaba, the Dead Sea and the Jordan Valley. This Rift Valley is a strip of sunken land walled in on either side by magnificent escarpments. The width from crest to crest of the escarpments is about 70 miles; the depth below the surrounding country varies from 1,000 to 2,000 feet. From the northern end of Lake Nyasa, a crescent-shaped branch proceeds north-west and forms the Central African Rift with its long narrow lakes such as Tanganyika and Albert. The same volcanic activity which created these rifts in the earth's crust raised, above the surface of the surrounding plateau, great volcanic mountains of enormous area, running up to 19,000 feet, such as Mounts Kenya, Kilimanjaro and Elgon and highland areas around them with altitudes of 5,000-10,000 feet.

These highland areas which have no counterpart in western tropical Africa, have a relatively cool climate, because of their altitude, and are regions where white settlement has taken place during recent years. The most important of these highlands extend, though not continuously, from Nyasaland to Kenya, and are occupied by a white population approaching 30,000, and steadily increasing in numbers. This creates in East Africa a variety of conditions and problems, relating in particular to the reaction of whites upon native Africans, which are not found in the tropical colonies on the west coast.

Another difference between our eastern and western possessions in Africa is the continuity of the former contrasted with the discontinuity of the latter. Apart from British Somaliland, which is more closely associated with Asia than with Africa, our eastern possessions form a continuous corridor from north to south. The "grain" of the land, with its north to south alignment of plateaus and valleys and its great inland seas, is, on the whole, helpful to inter-communication between the several territories. The problems of each tend, therefore, to affect the others closely; there is opportunity for political, economic and military co-operation. In the western group, on the other hand, our possessions are isolated from one another by foreign territory; their problems are more individual to each, and co-operation is neither so essential nor so possible.

It would appear from the foregoing that the eastern group possesses great advantages in its highland areas, its white population and in its opportunities for close co-operation, which are not possessed by the western group. These advantages are, however, largely discounted at present by other circumstances. Both groups produce in the main the same commodities, viz., tropical products for the European and American markets. But from Mombasa to England is twice as far as from Freetown to England. Further, the "grain" of East Africa, favourable perhaps to internal communications, is less favourable to the development of coastward routes than is the more uniform slope of the West African territories. Nor are there rivers in the east comparable as arteries of trade with the Niger, the Benue, the Cross, the Volta and the Gambia. In one respect, however, East Africa is better served as regards communications. The Imperial air route to the Cape

traverses the British corridor, and brings passengers and mails, twice a week, to Entebbe (5 days), Nairobi ($5\frac{1}{2}$), Dodoma (6), and Mbeya ($6\frac{1}{2}$); while an offshoot from Khartum to Kano takes mails there from Great Britain in five days, and will shortly be extended to Lagos.

There is a striking contrast, also, in the size and characteristics of the populations in our eastern and western territories. British West Africa is more than twice as densely populated as British East Africa, and, in the latter, there are large areas which are very sparsely peopled and where the supply of labour for full development is inadequate. There is a distinct contrast also between the cultural and political levels of the peoples in the two regions. In the west, long association with more civilized communities and a strong admixture of Arab and Sudanese blood, together with the earlier success of Mohammedanism, have produced in many parts a higher cultural level than obtains anywhere among the native races in the eastern group. Native and tribal institutions have withstood the impact of white penetration better, and there is no counterpart in East Africa (except perhaps in Uganda) to the large Mohammedan Emirates of Northern Nigeria, or the well developed tribal institutions in other parts which have made possible the "indirect rule" which has been successful there. In East Africa, on the other hand, the impact of white upon native has been more intense owing to recent white settlement; tribal organization and native institutions have tended to disappear; and the protectorate system, which is still more than nominal in the west, has merged almost entirely into Crown Colony administration in the east. An urgent problem, which arises in the eastern group, is to save those native institutions which have survived from being completely swamped by the advancing tide of white settlement; to develop them along the lines best suited to the native races; to make them a basis of native administration, and to prevent native interests from being subordinated to the interests of newcomers from other lands.

THE EASTERN AND SOUTHERN GROUP OF BRITISH COLONIES SOMALILAND PROTECTORATE

The Somaliland Protectorate (capital Berbera) lies between French Somaliland on the west, and Italian Somaliland on

the east, and is bounded on the south by Abyssinia. Its area is about 68,000 square miles, and it has an estimated population of 345,000. The country consists of an arid lowland near the coast, which rises in the interior to hills and plateaus, with a somewhat moister climate. The people are almost entirely nomadic, moving from one water-hole to another with their flocks and herds, according to the seasons. They are all Mohammedans.

The exports are skins, hides, gum arabic and cattle, and it is the chief source of food supply for Aden.

There are no railways. Communications are chiefly by camel caravans or near the coast by motor-cars. Roads are almost non-existent, and the rough tracks which run through the country are generally suitable only for pack transport. Camel caravans bring goods from Abyssinia to Berbera, moving at the rate of 15-25 miles a day, each Somali camel carrying from 2-3 cwt.

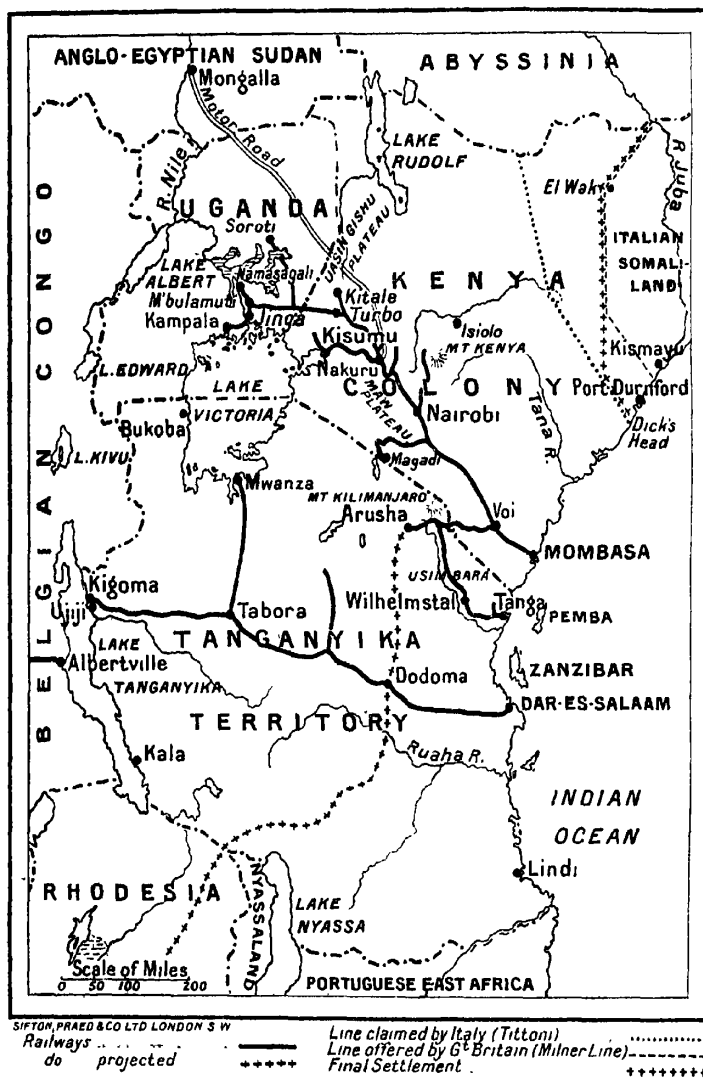
The defence force consists of the Somaliland Camel Corps of 400 (which include 100 Yaos from Nyasaland), and 500 police.¹ One flight, detached from the squadron at Aden, is normally stationed in Somaliland. The only harbours of importance are Zeila and Berbera, which are fairly sheltered. The altered status of Abyssinia and the growth of Italian naval and air power in the Red Sea must increase the value of these ports.

KENYA COLONY AND PROTECTORATE

Kenya Colony (capital, Nairobi), formerly known as the East Africa Protectorate, lies between the Umba River and Italian Somaliland, and extends for 500 miles inland as far as Uganda. It has an area of 224,960 square miles, and a population of about 3,041,000 of which 16,800 are Europeans, 39,500 are Asiatics and 12,100 are Arabs.

Beyond a narrow coastal plain, with lowlands running far up the river valleys, the land rises to a plateau of 5,000-7,000 ft. above sea level, and then sinks rapidly again by a series of escarpments to the Great Rift valley. Beyond this lies another plateau, which in turn sinks towards the swampy shores of Lake Victoria. The more important highlands lie within the triangle formed by Mounts Elgon, Kenya and Kilimanjaro

¹ Armed with S M L E rifles and Lewis Guns.



MAP 19. Kenya Colony and Tanganyika.

and include those of the Nandi Plateau, on the western edge of the rift valley, a healthy and beautiful country, 65 miles wide by 250 miles long, with an average height of 6,500 ft. above sea level. At the Laikipia escarpment the country rises to 13,000 ft., and to the same height in the Aberdare Range; while the Maw Plateau is fertile country rising to 9,000 ft.

Climate

The climate is marked by heavy rainfall on the coast, which decreases rapidly towards the interior. On the plateau, more than 5,000 ft. above sea level, the country is healthy and suited to European settlement, with a comparatively moderate temperature.

Resources

As might be expected, the low-lying areas near the coast produce tropical or semi-tropical produce, such as rice, coconuts and cotton; on the highlands, wheat, barley, maize, flax, coffee, sisal-hemp, are produced, and stock farming is increasing in importance. The mineral resources of the colony which consist of iron ore, mica, graphite, copper and gold have not yet been exploited fully, but appear to be of great value. Extensive forests exist which are not developed.

Communications

The chief harbours are Kilindini and Mombasa on the island of Mombasa, which is the terminus of the state-owned railway running through Nairobi for 618 miles to Kisumu on Victoria Nyanza (metre gauge).

A motor road from Nairobi to Mongalla on the Nile, is also important.

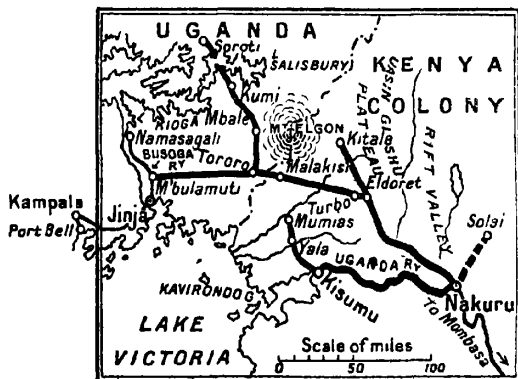
Jubaland

In the Secret Treaty of London of April 26th, 1915, regarding the terms on which Italy entered the war on the side of the Allies, Great Britain and France agreed that if their colonial dominions were augmented at the expense of Germany, Italy would be entitled to receive compensation by a revision of the frontiers of her African possessions where they adjoined French or British colonies. In accordance with this arrangement Italy obtained a portion of the province of Jubaland from Kenya. The chief difficulty in this settlement has been the migratory character of the Somalis who live in Jubaland. The country is arid and unfertile, and, hence, according to season the tribes move from place to place, and there is, under such circumstances, the danger of trouble in a country hard to police.

UGANDA PROTECTORATE

The Uganda Protectorate. Capital, Entebbe. Area, 94,204 sq. miles. Population, 3,513,600.

The chief product is cotton, of which Uganda is an important source of supply. Coffee, para rubber, ivory, hides and skins, tin ore, cocoa, and oil seeds are the other chief exports. *Resources*



MAP 20. Uganda Railway.

Communications are carried out chiefly by the following :— *Communications*

- (1) The Kenya Uganda Railway.
- (2) The Nile steamers which run from Khartum to Rejaf, whence there is a motor road about 100 miles long, round the rapids to Nimule where the steamer service from Lake Albert makes a connection
- (3) A steamer service between Kisumu and Entebbe and the other principal ports on Lake Victoria.

There is in addition a complete system of fairly good roads, which are used by Government motor vans.

TANGANYIKA TERRITORY

Tanganyika Territory (capital, Dar-es-Salaam) was the largest and most valuable of all Germany's possessions in Africa. It has an area of 374,000 square miles and an estimated population of 5,100,000, of whom about 23,000 are Indians and about 8,000 are Europeans.

It consists of a coastal strip 10–30 miles in width, fever-infested, and with a heavy rainfall and poor drainage. Beyond this lies an interior tableland where the natural vegetation is grass or scrub, and the plantation crops produced are sisal hemp and rubber. To the north, the interior tableland rises towards the slopes of Kilimanjaro and the Usambara Highlands, where the altitude is over 5,000 ft. and the climate temperate enough to make these districts a “white man’s country.” The chief exports are sisal, coffee, cotton, ground nuts and copra.

*The Partition
of German
East Africa*

In 1914, it was bounded on the north by British East Africa and Uganda; on the west by the Belgian Congo; and on the south by Northern Rhodesia, Nyasaland and Portuguese East Africa. It thus formed a barrier separating British equatorial Africa from the British possessions in the south, and was the one gap in the red corridor running from the Cape to Cairo. Further, it shut off the Belgian Congo from access to the Indian Ocean. By the Treaty of Versailles, a mandate for most of this German colony was given to Great Britain. The portion excepted from this mandate was a quadrilateral of land in the north-west, lying between the north end of Lake Tanganyika and Lake Kivu on the west, and Victoria Nyanza on the east. This tract of country, including the rich provinces of Ruanda and Urundi—probably the most densely populated and fertile part of German East Africa—was claimed by the Belgians as forming a natural part of the Congo, and in the settlement was mandated to Belgium, to be administered as part of the Belgian Congo. Belgium also received the following concessions from Great Britain:—(a) A free outlet for produce from the Congo, *via* Lake Tanganyika and the metre gauge railway running from Kigoma on the lake, through Tabora to Dar-es-Salaam. (b) Concession areas for the storage of goods at Kigoma and Dar-es-Salaam. (c) The right to transport goods in Belgian trucks to the coast.

*The British
Portion*

Tanganyika Territory includes a number of good ports, of which the most important is Dar-es-Salaam, whence a railway runs inland to Lake Tanganyika. There is also a railway from Tanga to Moshi near the highlands of Kilimanjaro with a connection to Voi on the Mombasa-Nairobi line. A railway

has been constructed from Tabora to Mwanza, and further projects are under consideration, such as a line from Tabora into Uganda, round the western side of Victoria Nyanza. In order to preserve a British corridor for this railway, a strip of territory on the east side of Ruanda was reserved to Great Britain. This line, if constructed, might form a section in a future Cape to Cairo Route. Various possible routes for a line connecting Nyasaland, Tanyanika and Kenya have also been surveyed.

PROTECTORATE OF ZANZIBAR

Population, 235,000

The island of Zanzibar is 53 miles long by 24 miles broad, and lies about 20 miles from the African coast, off Tanganyika territory. Twenty-five miles to the north-east of Zanzibar is the island of Pemba, which is under the same administration.

The climate is tropical, but healthy, with an average temperature throughout the year of 80° Fah., and a rainfall of 65 inches. The chief commodity exported is cloves, of which it exports the bulk of the world's supply. *Climate and Resources*

The port of Zanzibar is one of the best in East Africa, and is used as a fuelling station by the Navy. There are Government wireless stations in Zanzibar and Pemba, and Zanzibar is connected by cable with Aden, and also, by way of the Seychelles and Mauritius, with Durban. *Communications*

NYASALAND PROTECTORATE

The Nyasaland Protectorate (chief town Blantyre, capital and H.Q. of Govt. Zomba) lies along the southern and western shores of Lake Nyasa and extends towards the Zambezi river, having an area of 37,600 square miles and a population of 1,396,000 including 2,000 Europeans. The most important portion of the country is the Shiré Highlands, which are over 3,500 ft. in height, and in which Blantyre and most of the European settlements are situated.

The main resources are tobacco, cotton, tea, sisal, coffee, rubber, and fibre, and coal on the Shiré Highlands. *Resources*

As already mentioned, the development of the great natural resources of this country has been retarded by two difficulties. The first is the lack of proper harbour facilities at Beira. Steps *Communications*

are being taken, however, at present to ameliorate this, and a new deep-water berth was recently opened which allows ocean-going ships to go alongside. The other was the lack of a bridge across the Zambezi which necessitated the transshipment of passengers and goods at Chindio across the river by steamer to be reloaded on the railway at Murraca, thus entailing great expense and loss of time. A bridge across the river has, however, been erected, a loan for the purpose having been made from the Colonial Development Fund. With the bridging of this gap of two or three miles a rapid development of the valuable cotton and maize growing lands and coalfields of Nyasaland should follow.

RHODESIA

Rhodesia is the whole region extending from the Transvaal in the south, to the Belgian Congo and Tanganyika Territory in the north, and lying between Portuguese West Africa on the west, and Nyasaland and Portuguese East Africa on the east. It is divided by the Zambezi river into Southern and Northern Rhodesia.

By an arrangement made in 1923, Southern Rhodesia was given a generous measure of responsible self-government approaching Dominion status; and Northern Rhodesia has now the status of a Crown Colony.

*Southern
Rhodesia*

Southern Rhodesia (capital Salisbury) has an area of 150,344 square miles and a population of 1,109,000 including 49,900 Europeans. It lies mainly on a high plateau with a temperate climate, where agriculture and stock farming can be carried on successfully. The chief commercial centre is Bulawayo, through which the main line of railway from Cape Town to the Congo passes and at which one branch runs north-west to Livingstone on the Zambezi, and thence through Northern Rhodesia to Bukama in the Katanga region of the Congo. The other branch runs north-east from Bulawayo, through Salisbury, where it turns in a south-easterly direction, and passing through Portuguese East Africa, has its terminus at Beira. The chief exports are gold, asbestos, maize, chrome, cattle and tobacco.

*Northern
Rhodesia*

The administrative centre of Northern Rhodesia is Lusaka, and the chief commercial centre Broken Hill. The country is

a high plateau, mainly covered with thin scrub, but it has large areas of good arable and grazing land. Its area is 287,950 sq. miles and its population 1,341,000 including about 10,000 Europeans.

The chief commodities exported are maize, cotton, tobacco, rubber, timber, gold, copper, zinc and lead. Indeed, Northern Rhodesia is now one of the most important sources of copper in the world.

The development of both Northern and Southern Rhodesia is retarded by their lack of communications and their distance from seaports. Various schemes to remedy these difficulties are outlined in a subsequent paragraph. There is a growing body of opinion that a union of the two Rhodesias would assist in this development by enabling a larger view to be taken with regard to economic facilities, reducing overhead expenses, and leading eventually to the formation of a white Dominion in this part of Africa. The chief difficulty in the way of progress towards a Dominion of Rhodesia is the smallness of the white population in Northern Rhodesia and the very large native population whose interests, as the original inhabitants, must be safeguarded. An alternative suggestion to incorporate Southern Rhodesia in the Union of South Africa is not likely to receive support in Rhodesia, where the white population is intensely loyal to the British connection and views with disapproval the efforts in the Union to obtain every detail of independence compatible with the Statute of Westminster, or even in the Union where the Boer section would dislike the resulting increase in British population and the additional million native Africans.

*The Future
of Rhodesia*

SWAZILAND

Area, 6,705 square miles. Population (1931), 120,000 (2,800 Europeans).

Swaziland (capital Mbabane) at the south-eastern corner of the Transvaal is administered under the High Commissioner for South Africa. The chief resources are maize and tobacco, though the development of cotton growing is being attempted. The grazing countries of Swaziland are used each year for winter grazing for sheep brought in from the Transvaal. The mineral wealth of the country appears to be considerable,

but is mainly unexploited, though alluvial tin and gold are mined to some extent. Communications are by motor, small carts or runners.

BASUTOLAND

Area, 11,716 square miles. Population (1931), 570,000.

Basutoland is a high plateau lying to the north-east of the Cape Province, and bounded by the Orange Free State, Natal and Cape Province. It is a native territory administered by a Commissioner under the direction of the High Commissioner of South Africa, and has its administrative centre at Maseru.

The country is well watered, has abundant grass, a beautiful climate, and is probably the best grain country in South Africa. There are no navigable waterways; communications are by road, or by the railway 16 miles long, which connects Maseru with the Bloemfontein-Natal line. The whole territory is a native reserve and is over-populated on its present level of development.

BECHUANALAND PROTECTORATE

Area, 275,000 square miles. Population (1931), 200,000 (2,000 Europeans).

The Bechuanaland Protectorate (administrative centre Mafeking) extends from the Transvaal and Matabeleland on the east, to South-West Africa on the west. About half of the country is occupied by the Kalahari Desert, and the remainder is chiefly pastoral. The main line of railway from Cape Town to Rhodesia and the Belgian Congo passes through it.

Nearly half of the area is occupied by native reserves.

SOUTH-WEST AFRICA

South-West Africa (capital, Windhoek) is an ex-German colony mandated as a Class C mandate to the Union of South Africa. It is partly a desert region, with an area of 322,394 square miles, a native population of 257,000 and a white population of 32,000 (1930).

It consists partly of a coastal desert from 15-85 miles wide, marked by great sand dunes, and with a rainfall of less than

one inch a year. Farther inland, the rainfall increases on account of the rise in the land and consequent condensation of moisture in the air, and there are grazing lands of some value. Farther east again lies the Kalahari desert. The country is not susceptible, therefore, of much intensive development, and offers little attraction for European settlers. It is essentially a stock raising country, exporting some livestock. In addition, diamonds, ivory and copper are exported, and copper, lead and tin are also mined in small quantities.

The future development of this greatly handicapped country depends largely on the progress of its neighbours. At present almost all traffic from Rhodesia takes the cheapest route, viz., that which runs through Portuguese East Africa and thence by sea from Beira. If a route can be developed from Northern and Southern Rhodesia to some port such as Swakopmund in South-West Africa, the saving in distance by sea to Great Britain would be a matter of 1,800 miles, while the journey by rail would not be very greatly increased, and, indeed, in the case of parts of Northern Rhodesia might even be shorter. Such a route would undoubtedly benefit Rhodesia and Great Britain by shortening and cheapening the transport of goods, and South-West Africa would greatly benefit as well. A step in this direction has been taken by the extension of the Swakopmund-Windhoek line to Gobabis, the intention being to continue it farther by degrees as new country is opened up, until eventually it reaches the Rhodesian railway system. A survey of this projected line has been carried out.

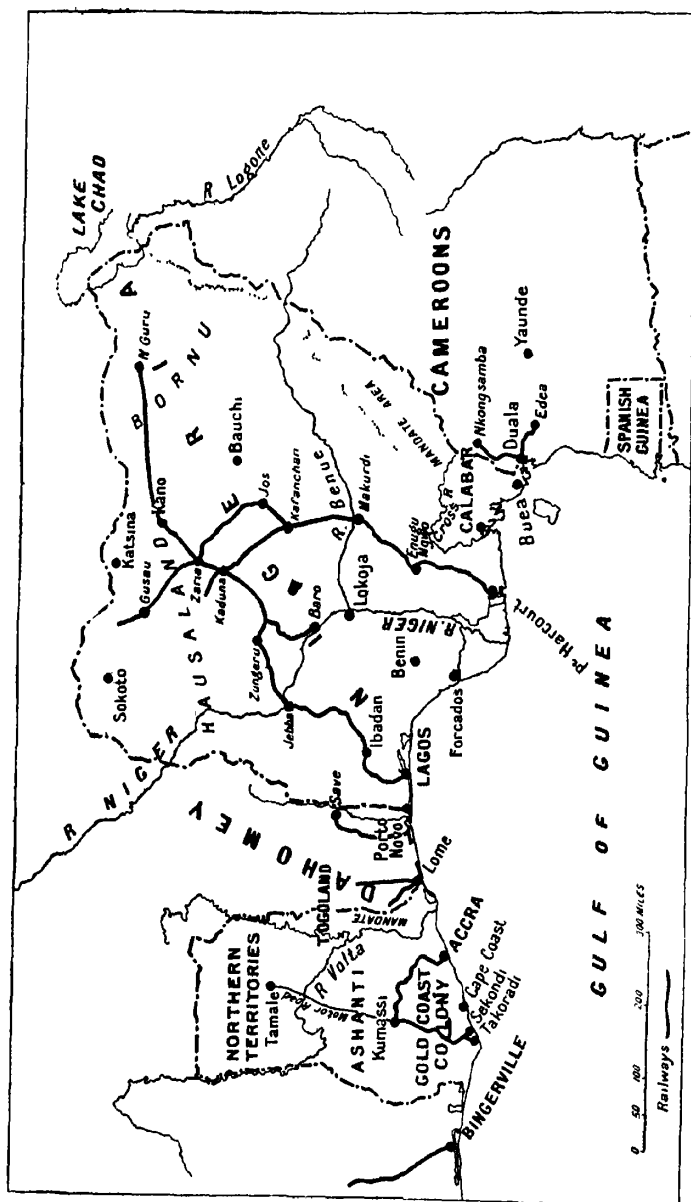
Walvis Bay, which was formerly British territory, is administered as part of South-West Africa, and is the chief harbour for the whole region. It is also a potential port on the Cape route, useful if the Mediterranean were closed.

The European population consists almost entirely of people of German and Boer extraction; the Native population of Hereros, Ovambos (Bantu), Bushmen and Hottentots, and also of people akin to the Cape Coloured.

South-West Africa has in the last few years assumed an importance which its capacity for white settlement does not warrant. In 1914 its European population was 13,000; to-day it is 33,000 of whom about half are of German descent, the rest being mainly Boers. German colonists have been

Railways

*The future
of South-
West Africa*



encouraged and treated generously both as regards naturalization and representation in the local legislative assembly. But from 1930, and particularly since the rise of the Nazi regime, there has been increasing friction between the German and other sections of the population, and more recently there has been some propaganda for the return of the Territory to Germany. This movement can find little basis in the case of South-West Africa on the grounds that it is a source of raw materials or outlet for white population. Hence there are some reasons for regarding the demand as based chiefly on strategic and political arguments.

THE WESTERN GROUP OF BRITISH COLONIES

NIGERIA

Nigeria (capital, Lagos) consists of the Colony and the Protectorates of Nigeria, having an area of 373,000 square miles, and a population of 20,762,000 (1931). *Colony and Protectorate of Nigeria*

It can be divided into three geographical zones: *Geographical Features, Climate and Resources*

(1) A belt of low-lying land along the seaboard, consisting of swamp and almost impenetrable forest, varying in width from 5-60 miles.

(2) A central belt of thickly wooded undulating country with occasional hills which, as in the Murchison Range, rise to a height of 6,000 ft., and in which lies the important Bauchi plateau, 4,000 ft.

(3) Beyond the central belt there stretch northward towards the desert the more open plains of Hausaland and Bornu. These great rolling plains have an average height of 1,800 ft. above sea level.

The climate in the coastal region is moist, warm and unhealthy; inland, as the land increases in altitude, it becomes less humid, while on the plateaus to the north, though the temperature by day is tropical, the evenings are cool, or even cold, with occasional frosts.

The main exports are palm oil, kernels, tin ore, cocoa, ground nuts, timber, hides and skins, ivory and cotton lint. There is a region of 9,000 square miles in Northern Nigeria, and another region in Southern Nigeria, possessing rich alluvial tin. Coal also is found in the Udi region of Southern

Nigeria, and a Government colliery produces coal of good quality which is railed from Enugu to Port Harcourt. Gold is also being mined in increasing quantities.

*Communica-
tions*

The principal ports are Lagos and Port Harcourt, Forcados, Calabar, Victoria (in British Cameroons), Brass, Bonny and Opobo. Lagos and Calabar possess engineering and repairing workshops, and at Lagos moles have been constructed and a deep channel over the bar now exists, to admit of ocean steamers entering the harbour. Deep-water docks are also being constructed.

Nigeria is the basin of the great River Niger with its many tributaries, and it is natural that these rivers should form the chief routes for movement. The Niger itself is navigable as far as Jebba; from there on, it is shallow and broken by many rapids.

The western line of railway (gauge 3 ft. 6 ins.) runs from Lagos through Jebba, Zungeru and Zaria (the centre of the cotton district) to Kano. Branches from this line run from Minna to Baro on the Niger, and from Zaria to the tinfields of the Bauchi hills (60 miles to the east, 2 ft. 6 in. gauge). The eastern line runs from Port Harcourt on the Bonny Estuary to the Enugu coalfields, and effects a junction with the western line at Kaduna, which is the headquarters of the Nigeria Regiment.

There is a fortnightly mail service from Liverpool to Lagos and a monthly one to Calabar. The weekly air mail from Great Britain to Kano *via* Khartum takes 5 days and will shortly be extended to Lagos, Accra and Freetown.

The average density of population is 60 per square mile, which is greater than that of any other European possession in central Africa. The people are, however, unevenly distributed, the greatest concentrations being in the north and south, while the middle is very sparsely populated. Lagos itself has 150,000; and round it to the north as far as Ilorin is an area which is thickly peopled. Here, the Yoruba nation (4 millions), vigorous and progressive, live. Though naturally good soldiers they do not enlist as much as formerly owing to increasing prosperity due to the cultivation of cocoa and to other trading activities. Along the lower reaches of the Niger and north of Port Harcourt are the Ibos (3 millions). They

make good carriers but are not enlisted into the military forces. There are also areas of denser population round Sokota in the north-east, and Kano, Katsina and Zaria in the north. This is mainly Hausa (3 millions), negroid and Mohammedan. The Fulanis (2 millions) who live round and to the east of Kano, and are partly Mohammedan and partly Pagan, and the Kanuri, round N'Guru ($\frac{1}{2}$ million) who are Mohammedans and are enlisted in the R.W.A.F.F.

THE CAMEROONS

In February, 1916, the British Government agreed with France on the division of the Cameroons. By the Peace Treaty, the two countries became mandatory Powers for the colony, four-fifths of the territory being placed under French control. *The Partition of the Cameroons*

France not only received back territory lost to Germany by an agreement after the Morocco crisis of 1911, but also obtained the port of Duala, the whole of the existing railway system, and the important route which leads from the coast to the Shari river, and which is the most useful outlet from the Lake Chad district. The remainder of the colony—a narrow strip on the north-west border, including the ports of Buea and Victoria—was mandated to Great Britain, and is administered by Nigeria. The boundary is in general a mountain one, running along the watershed, and giving to Nigeria the headwaters of the Cross River. This has strengthened the position of Nigeria, as the original boundary between Nigeria and the Cameroons was an arbitrary line, disturbing to native life and customs. The line now runs through a region which is lightly populated, and is unlikely to disturb local tribal arrangements.

The products of the Cameroons are mahogany, rubber, palm oil, cacao, tobacco and cotton. In the interior it has valuable grasslands which are at present difficult of access, and there is a possibility of the development of rubber on a profitable scale. The population of the British part is 700,000 (1931). *Resources*

THE GOLD COAST

The Gold Coast Colony consists of the colony itself (24,000 square miles), Ashanti (20,000 square miles) and the northern

territories (36,000 square miles). The total population (1931) is 3,121,000.

*Geographical
Features and
Climate*

The country possesses a coastal strip, which is low and unhealthy, having an average temperature of 78°, with great humidity. Farther inland it becomes more broken, and eventually changes into a densely wooded interior. The north-east corner of the northern territories has good arable country and pastureland.

Resources

The chief exports are cocoa, palm oil, kernels, kola, rubber and manganese. Ashanti possesses rich forests with excellent timber (mahogany and cedar) as well as oil trees, rubber and gum copal. Maize, coco yams, bananas, ground nuts and cocoa are also produced. The northern territories, north of latitude 8°, which are very hot and dry, produce grain, indigo and tobacco.

*Communica-
tions*

The ports are Accra, where surf boats have to be used, and Takoradi where a deep-water harbour has been built. The latter is the only important harbour between Freetown and Lagos where large ships can put in. Cape Coast and Winnebah are ports of call for small steamers. The Government railway runs from Takoradi on the coast to Kumasi, 168 miles (gauge 3 ft. 6 ins.) with branches to Prestea, Inchaban and Brumasees. A line also runs from Accra to Kumasi, where it joins the Kumasi-Accra line. Many good motor roads have been built, and motor vehicles have become an important means of transport. The most important is that from railhead at Kumasi to Tamale in the Northern Territory. Off these main lines, goods are carried chiefly by head portage, the load borne by each porter being from 50-70 lbs.

*Administra-
tion*

The capital of the Gold Coast Colony is Accra; of Ashanti, Kumasi; and the administrative centre of the northern territories is Tamale. The Governor of the Gold Coast is also Governor of Ashanti, and the northern territories and Ashanti are administered by chief Commissioners under the supervision of the Governor.

TOGOLAND

Togoland was the smallest of Germany's African colonies, and is a narrow strip of territory lying between French Dahomey on the east and the Gold Coast on the west. It is

populated by at least one million natives. The country has an unhealthy coastal strip, but the highlands of the interior are capable of agricultural development. The Germans intended to make Togoland one of the sources of cotton for their manufactures and had also developed valuable cacao and tobacco plantations.

It is roughly a quadrilateral in shape, with a sea coast of only about 31 miles, but broadens out towards the interior. The main feature is a range of hills to the east of the Volta river, which run in a north-easterly direction. This range is highest in its south-eastern part where it rises to over 3,000 ft., and lower and wider to the north-east. The range traverses the whole country, and continues into French territory.

The Peace Conference, in dividing Togoland, gave to France approximately two-thirds of the whole area, including the sea coast with the roadstead of Lome, while the remaining one-third was mandated to Great Britain, and is administered by the Government of the Gold Coast. The boundary between the French and British portions is, on the whole, a mountain line, traversing the range already described, and giving the plain of the Oti river (a tributary of the Volta) to the Gold Coast, and the coastal plain and the valley of the Mono river to Dahomey.

*The Partition
of Togoland*

The Germans had constructed three lines of railway diverging from Lome, one to Anecho, along the coast, and the others to Misahohe and Atakpame. All these lines, as will be seen from the sketch map, fall within the French area.

One of the serious difficulties in connection with the development of Togoland is the spread of sleeping sickness in the coastal region and along the rivers.

THE COLONY AND PROTECTORATE OF SIERRA LEONE

The colony and protectorate of Sierra Leone, lying between Liberia and French Guinea, have an area of 31,000 square miles and a population of 1,600,000 (1931). The capital—Freetown—is the greatest seaport in West Africa, and a

Climate naval fuelling station. It is also the headquarters of His Majesty's Forces in those regions.¹

The climate is hot and humid from May to November.

Resources The chief exports are coco nuts, palm kernels, ginger and palm oil. Platinum and gold are found in small quantities.

Communications There is a Government railway (2 ft. 6 ins.) from Freetown to Pendembu, near the Liberian frontier. From Boia junction, 64 miles from Freetown, a line runs to Kamabai, and further extensions to Baga are contemplated. There is also a mountain railway from Freetown to the official headquarters at Hill Station, a distance of 5½ miles.

GAMBIA

Gambia (capital, Bathurst) consists of the Island of St. Mary on which Bathurst stands and a narrow strip along both sides of the Gambia River. It has a hot and unhealthy climate, especially during the rainy season—from June to November. There are no railways. Its population is about 200,000 (1931).

The main resources are ground nuts, rubber, beeswax, hides and palm oil.

Resources Bathurst is connected by cable with St. Vincent (Cape Verde) and Konakry (French) and Freetown (Sierra Leone) and is only 20 miles from the important French naval and air port at Dakar.

RAILWAYS IN TROPICAL AFRICA.

A Cape-to-Cairo Railway One cannot but view with a certain amount of satisfaction the map of eastern Africa as it is to-day, with its corridor of red running from the Sudan to Cape Town. This corridor is approximately 5,000 miles long, passes through undeveloped lands of great fertility, tropical forest, plateaus where the climate is almost temperate, past great lakes like Tanganyika, Victoria, and Nyasa and possesses great navigable rivers like the Nile. But no trans-continental railway traverses it.

Various proposals have been made from time to time for bridging the gap which at present exists in the central part of the corridor. One proposal is that a railway should be con-

¹ From Southampton to Freetown, 3,000 miles.

"	"	Bathurst, 2,500	"
"	"	Takoradi, 3,800	"
"	"	Lagos, 4,100	"

structed from Broken Hill in Northern Rhodesia to Bismarckburg at the southern end of Lake Tanganyika. The journey from Bismarckburg to Ujiji could be done by steamer ; from Ujiji to Tabora and Tabora to Mwanza by rail ; and from Mwanza the regular steamship service on Victoria Nyanza to Jinja could be used. The line from Jinja to Namasagali, if extended to Rejaf, would bring the traveller to a navigable part of the Nile.

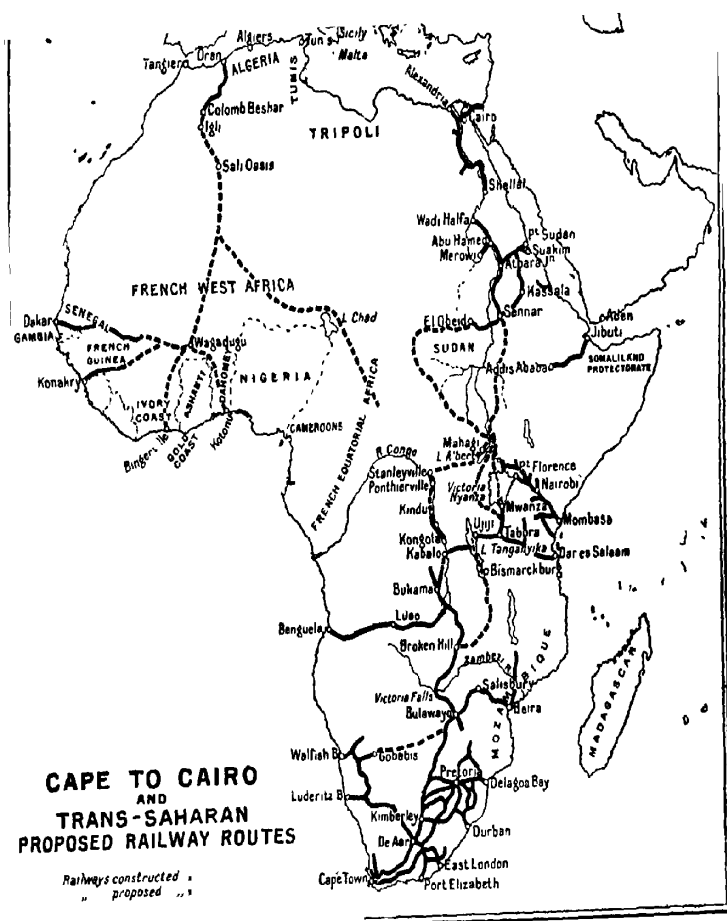
Another and more important project is the construction of a railway from Northern Rhodesia through Nyasaland to Dodoma and Arusha in Tanganyika to join up with the Kenya Uganda Railway at some point such as Voi. This line would have the advantage of running through country possessing great agricultural and mineral possibilities, and it would be a central line of communication which would help towards the development of Uganda, Kenya and Tanganyika.

There are untouched coal seams in the Shiré Highlands, and also at the north end of Lake Nyasa. Water power for the future electrification of the lines could be obtained in abundance from the Zambezi and other falls. Copper and other minerals exist in the south-west corner of Tanganyika, and in Rhodesia. Further, a great deal of the region passed through, though tropical in latitude, is more than 5,000 ft. above sea-level, and is therefore comparatively temperate in climate.

The completion of such routes must obviously be rather a matter of growth in the course of development of the colonies concerned than of any set plan. There is no urgent economic need for them at present. Commerce tends to take the cheapest route, which from any part of the British corridor is the route to the coast, and thence by sea. Hence, the tendency in railway building in Africa—as in the case of Australia—is to build lines from the coast, inland in order to tap quickly the resources of the interior. Such lines are shorter, and therefore cheaper, as well as being more quickly remunerative. Typical examples are the existing line from Beira to Salisbury ; the line from Dar-es-Salaam through Tabora to Ujiji on Lake Tanganyika ; and the line from Mombasa through Nairobi to Port Florence on Victoria Nyanza, and to Uganda through Nakuru.

Further, the saving in distance would not be so considerable as to outweigh the difference in cost. The circumstances

*General
Criticisms of
the Cape to
Cairo Route*



MAP 22. Cape to Cairo—proposed railway routes.

are in no sense similar to those which rendered the building of the Canadian Pacific desirable and even imperative. The argument that a Cape to Cairo service would be useful as a fast passenger and mail service is likely to have little weight in view of the rapid development of air routes for this specific purpose. It is therefore likely that a trans-continental railway will only gradually evolve in the process of linking up the various lines and waterways now in existence.

The progress of railway construction in tropical Africa is retarded by the seasonal nature of the agricultural traffic, and the long periods when railways cannot earn to full capacity. Hence, the development of mineral resources, giving an all year traffic, is very desirable. The various schemes of railway construction, which have been embarked on or are projected, aim therefore at tapping rich mineral as well as agricultural regions. Thus, the line opened from Benguela to Luao on the borders of the Belgian Congo has been extended into the centre of the great Katanga copper area of that country ; and the scheme for a line from Kampala in Uganda to Ruwenzori aims at tapping the rich mineral resources of the north-east Congo. Projected routes are also being considered for diminishing the isolation of the two Rhodesias which contain important copper and other mineral resources. The building of a connection between Bulawayo and the Beit bridge on the Limpopo River has put Bulawayo in direct communication with Delagoa Bay ; and an extension of the line which now runs from Walvis Bay to Gobabis, through Bechuanaland to Southern Rhodesia is under consideration. The isolation of Nyasaland has been diminished by the construction of a bridge across the Zambezi at Chindio and, in each of the East African territories, schemes of railway construction are under consideration. Among these schemes, one of great importance is the proposal already mentioned for the construction of a railway which would unite Kenya, Tanganyika and Nyasaland.

*Progress of
Railway
Construction
in Tropical
Africa*

THE POLITICAL PROBLEMS OF EAST AFRICA

Kenya, Uganda and Tanganyika illustrate in an earlier stage some of the racial and political problems which already exist more acutely in the Union of South Africa. The population

282 IMPERIAL MILITARY GEOGRAPHY

of these three territories consists of the following racial sections :—

	<i>Natives</i>	<i>Whites</i>	<i>Asiatics</i>	<i>Arabs</i>
Kenya (1930)	2,979,600	16,800	39,500	12,100
Uganda				
(1930)	3,497,650	1,973	14,002	
Tanganyika	5,020,000	8,200 (1931)	32,700 (1921)	4,810 (1921)

Up to the present, the conflict in interests between these sections has been least in Uganda and Tanganyika where no approach has been made to local representative government. It is in Kenya that the problems have made their appearance earliest and most acutely.

*The Indians
in Kenya*

There the status of the Asiatic section, which is mainly composed of Indians, has provoked many difficult controversies. For several centuries, there have been Indian merchants established along the east coast of Africa, and, with the opening of Uganda and Kenya under British administration, Indian traders have penetrated into the interior. Many Indian artisans and labourers, employed on the construction of the Uganda railway, remained to engage in commerce, and, at the beginning of the present century, the number was greatly increased by the arrival of other artisans, clerks and small traders from India. There are also a few Indian professional men, but the agricultural Indian is comparatively rare.

*The White
Man in
Kenya*

The small community of white settlers, outnumbered by the Indian community by more than two to one, is composed mainly of the owners or managers of estates in the plateau regions, where their energy and initiative have contributed to the development of the country in a degree far out of proportion to their numbers.

The Natives

The natives, who form 99 per cent of the whole community, belong to many different races and tribes, and provide the labour for practically all enterprises; and in Uganda and Tanganyika are also the owner producers of the agricultural commodities.

*The Indian
problem*

Three important issues have arisen in the relationships between the white and Indian sections of the population, (1) the question of ownership of land in the Highlands; (2) the question of racial segregation, and (3) the question of political status. With regard to the first of these, in 1908 the British

Government announced a policy of reservation of the Highlands for European settlers, and, since then, these areas have become the home of many white men and their families who have developed them and increased the wealth of the whole country. Indians have not been permitted to acquire lands in those parts, and have considered that in this respect they have been treated with unfair discrimination. Finally, when, after the war, it was decided to give effect to the long standing desire of the European community for representation on a Legislative Council, by means of elected members, this was followed by a demand from the Indian community that they also should have representation commensurate with their numbers and interests; and the question was further complicated by a division of opinion as to whether the Indian and British voters should be on one electoral roll, or should be on separate communal rolls.

The policy of the British Government was eventually outlined in the Devonshire Report in 1923. This report laid down the important axiom that primarily Kenya is an African territory, that the interests of the African must be paramount, and that if those interests and the interests of the immigrant races conflict, the African interests must prevail. The fundamental duty of the British Government in Kenya, as in Uganda and Tanganyika, was therefore to be that of a trustee for the natives; and it regarded the grant of responsible self government to Kenya as out of the question for the present because, apart from other considerations, it would mean the government of a large majority of politically inarticulate people by a small minority, whose interests might not be identical with the interests of the native and whose opinions might not be unbiassed.

The report recommended, however, that the various interests in Kenya should be represented on a Legislative Council which should consist of 19 nominated members (mostly officials), 11 elected Europeans: 5 elected Indians (chosen by the Indian community on a separate electoral basis): 1 elected Arab, and 1 nominated member to represent the interests of the Natives.

It cannot be said that the aspirations of either the British or Indian settlers were satisfied by this arrangement, which

*The
Devonshire
Report
(1923)*

came into effect in 1925. The British settlers regard Kenya as their home, and desire a further share in its government. They argue that their experience and residence in the country make them at least as capable of governing the native African in the right way as is a distant department in London. The Indian settlers feel that their interests are being sacrificed to those of the British element, that their representation is inadequate and that the communal system is, in effect, a colour bar. They fear that any extension of representative government in Kenya would be so regulated as to diminish their status. They claim equality on the score of length of residence in the colony, contribution to its economic progress, and their British citizenship.

*The Problem
of the Native
African*

These problems are still further complicated by what is the ultimate question—the position of the African peoples who form the vast majority of the population.

At the present time, the small white minorities have the skill and knowledge by means of which the country is developed. They have the power of organization and they have also the weapons of modern warfare. The large native majority forms the reserve of labour without which white settlement would be an utter impossibility. One problem is to prevent the exploitation of the native as a pool of cheap labour, or the alienation of his tribal reserves, which contain much land valuable for agricultural and in some cases for minerals production.

Another is “to devise forms of government which shall satisfy the legitimate aspirations of the minority for self-government, and yet be just to the native majority, not only in the immediate present, but when, after the lapse of years, the inarticulate majority shall have advanced far on the path of progress and has become self conscious and self assertive.”

*Proposed
Confederation of East
Africa*

Before attempting to describe the policy which is being pursued with regard to these problems it is desirable however to outline another matter which is closely connected with them. The map of East Africa shows that there is, at least, a *prima facie* case for intimate co-operation, if not actual political union, between Kenya, Uganda and Tanganyika. All three are closely connected by physical and geographical links. Uganda's communications to the sea run

through Kenya : all three abut on Lake Victoria : through all extends the plateau region suitable for white settlement. The advantages of closer union, particularly in relation to railway construction, the control of ports and harbours, telegraphs, customs, research and also in defence, are self-evident. Hence, during the last few years, much attention has been focussed on proposals for a confederation of Kenya, Uganda and Tanganyika at least from an administrative point of view.

These various problems were considered by a number of Commissions and finally by a Joint Committee of both Houses of Parliament, which examined witnesses, received evidence from representatives of all sections in the three territories and presented a report in 1931 which may be taken as the basis of present policy. In this report, the committee stated that the arguments advanced against a closer union, viz., the cost involved : the reluctance of the natives of Tanganyika and Uganda to be more intimately associated with Kenya as they know it by hearsay to-day, and the existence in each territory of a marked local feeling, led them to conclude that any far-reaching step was undesirable. They affirmed that much valuable co-operation in transport, customs and research could be effected without constitutional union. In view of the special importance of transport, they recommended the creation of a Railway Board and the appointment of an Adviser on Transport for all three territories, who should attend meetings of the Governors' Conference when matters affecting communications were under discussion. As regards customs, they suggested that the Governors' Conference should ensure the consistent working of the existing customs union between the three territories. They further urged that the Governors' Conference should be a general means of co-operation and co-ordination, taking the place of a suggested High Commissioner with supervisory powers, that it should be regarded as being in permanent session, that its regular meetings should be held at least twice a year and that extraordinary sessions should be attended by the Governors of Northern Rhodesia and Nyasaland and by the British Resident at Zanzibar.

With regard to the native problem they defined more closely the "paramountcy" of native interests referred to in the Devonshire Report in order to relieve some of the apprehensions of the white settler. They said "it means no more than that the interests of the overwhelming majority of the indigenous population should not be subordinated to those of a minority belonging to another race, however important in itself." At the same time, they asserted that the fullest security must be given to the legitimate interests of the latter. As regards native political development they said that "the main line . . . should be to promote the growth . . . of native councils with increasing financial, judicial and executive functions. . . . Out of these provincial native Councils may well grow . . . a central native Council . . . for the whole of the territory concerned." Thus they hoped something similar to the "indirect rule" which has been successful in West Africa might be achieved. They recommended the appointment of a native chief Commissioner for the administration of all native affairs in Kenya, who should be an officer of high standing with direct access to the Governor.

Finally, with regard to the Legislative Council of Kenya, they did not recommend the adoption of a common electoral roll for Europeans and Indians or an increased European representation, but they advocated an increased nominated representation of native interests.

It is obvious that these recommendations were based on a high sense of duty to and trusteeship for the natives. But their application in practice has, in the view of many white settlers, not given sufficient weight to the interests of the whites. They argue that the country has been and must continue to be developed mainly by white settlement, and feel, therefore, that they should have a real and responsible share in the government. They are not satisfied with the present form of government, in which their legislative power is negligible and their executive power is non-existent. They claim that "Downing Street" government is always dilatory and "anti-settler," and that no satisfactory steps have yet been taken, in spite of commissions and promises, to settle the grave question of land, by allotting a defined part of the Highlands for white settlement only. Further, they criticise

the whole policy of "indirect rule" in West and East Africa on the grounds that it exalts inefficiency, and prevents political and educational progress.

The future of Kenya, for these reasons, is of great interest to the British people as a test of the sincerity of the policy of trusteeship. To foreign nations, however, it will be a test of a totally different matter—of British efficiency in colonial administration as compared with the efficiency of a totalitarian state which has now acquired a great and undeveloped area by conquest on the northern border of Kenya.

THE DEFENCE PROBLEMS OF TROPICAL AFRICA

These political problems have been described at length *East Africa* because they are matters which touch on questions of defence. Unless the policy pursued with regard to the mixture of racial elements is effective, internal security troubles may arise in the future. Unless there is co-ordination particularly in matters relating to transport and the defence forces of the territories co-operation in time of external attack might be unsatisfactory. Hence, particular attention is drawn to the fact that the various battalions of the King's African Rifles which are situated in the three territories are under the orders of the Governors in each of these respective territories, and that the chief *local* means by which co-operation can be carried out is the Governors' Conference. The *ultimate* means is, of course, the Secretary of State for the Colonies who is advised, as are also the Governors, by a military Inspector-General who has his headquarters at the Colonial Office.

The composition and distribution of the King's African Rifles are described in a subsequent section. Their primary functions are (a) the defence of the East African Dependencies ; (b) Internal Security. As regards the first, external attack of a serious nature from Portuguese East Africa, the Belgian Congo or Italian Somaliland is extremely improbable. The Abyssinian frontier is, however, one towards which the attention of the K.A.R. has been frequently directed ; trouble has arisen from time to time in the Turkana country near the northern frontier and west of Lake Rudolf, and with the development of Italian power and military and air forces in Abyssinia, increased interest will necessarily be taken in the northern frontier.

West Africa

The functions of the Royal West African Frontier Force are (a) to preserve internal security; (b) to provide a striking force to deal with inter-tribal trouble or insurrection; (c) to provide a striking force to assist a neighbouring colony in case of necessity. It is spread over the Gambia, Sierra Leone, the Gold Coast and Nigeria, and, like the King's African Rifles, in each Colony and Protectorate the troops are under the orders of the Governor and are entirely independent of units in the other West African territories. Similarly, the Inspector-General with headquarters at the Colonial Office is responsible for its administration and training and is the military advisor to the Secretary of State and the respective Governors.

The King's African Rifles comprise :—

(I) Northern Brigade (H.Q. Nairobi) :

The distribution of the King's African Rifles

Uganda.—4th Battalion K.A.R. (H.Q. Bombo). One company of this battalion is normally stationed in the Turkana country of Kenya.

Kenya.—3rd Battalion (H.Q. Nairobi). The 5th Battalion (H.Q. Meru). 1 Signal Section and S. and T.

(II) Southern Brigade :

Tanganyika.—1st Battalion stationed at Tabora as a reserve for the Southern Brigade. 6th Battalion (H.Q. Dar-es-Salaam), recruited in Tanganyika for local defence only.¹

Tanganyika and Nyasaland.—2nd Battalion (H.Q. Zomba) Recruited in Nyasaland, but two companies in Tanganyika at Masoko and Songea.

1 Signal Section and S. and T.

(III) Somaliland Camel Corps (H.Q. Burao). Recruited roughly one-third in Nyasaland and two-thirds in Somaliland.

(IV) Reserve King's African Rifles, consisting of men who have completed their period of service (3 years with the Colours with re-engagement for further periods of 3 years up to a maximum of 9) and are transferred to the reserve for 6 years.

(V) K.A.R. Reserve of Officers. A reserve consisting of ex-officers permanently resident in East Africa.

¹ Since Tanganyika is a Mandated Territory.

The R.W.A.F.F. consists of

The Gambia Company (H.Q. Cape St. Mary) recruited locally. *The Royal West African Frontier Force*

The Sierra Leone Battalion (H.Q. Wilberforce, Freetown)

—Recruited locally.

The Gold Coast Regiment (H.Q. Kumasi), consists of 1 Section Light Artillery of 3·7 howitzers (carried by porters). 1 Signal Section, 2 battalions of Infantry (one at Accra and one at Kumasi).

The Nigeria Regiment, commanded by a Commandant with Staff, has its H.Q. at Kaduna : signalling school and depot at Zaria.

It consists of :—

1 Light Battery of Artillery at Zaria.

6 Battalions of Infantry at Kaduna, Kano, Zaria, Calabar, Ibadan and Enugu, respectively.

1 Signal Training Centre.

1 Depot.

It therefore forms a strong and important central reserve for all the West African Colonies. It is recruited locally, the largest percentages of recruitment being from the Hausas, Fulani, Bagirimi and Beriberi.

Both the King's African Rifles (except the 6th Battalion) and the Royal West African Frontier Force are liable for service overseas with the authority of the Secretary of State for the Colonies. British officers, warrant officers and non-commissioned officers are seconded from the Regular Army, in the case of the R.W.A.F.F. for a first tour of service of 18 months and for further tours of the same period, if recommended by the local authorities in the Colony concerned.

Recent events in North-East Africa have led to a reconsideration of the defence problems and forces in our East African territories. Thus, a committee appointed in 1936 recommended the formation of a Kenya Territorial Regiment, recruited from European settlers. The object of this is to supply officers, N.C.O.s and instructors for the K.A.R. in case of external aggression. The Committee also recommended the formation of an Auxiliary Force of Europeans

to take its share in the maintenance of internal security if necessary. Moreover, Mombasa has become a defended port, and a squadron R.A.F. is now stationed in Kenya. Indeed, the Colony, with the larger areas of temperate climate, may become, in the future, an important air command, centrally situated to our whole East African Empire and able to reinforce quickly the Sudan, Aden, or India.

CHAPTER XVII

EGYPT AND THE ANGLO-EGYPTIAN SUDAN

It has been the inevitable fate of Egypt that its territory should be of profound importance to other peoples. Across ^{*A brief historical survey*} it runs one of the shortest routes from the Mediterranean to the Indian Ocean. In the Nile Delta and Valley it possesses the only fertile region in a thousand miles stretch along the south coast of the Mediterranean. Hence, long before the Suez Canal was thought of, and while the Cape route was still unknown, it was to successive Roman and Arab conquerors, both a corridor between East and West and the only granary in a great expanse of desert.

With the decline of Arab authority and the rise of the Ottoman Turks it became a Turkish Province (1517), ruled by a Pasha, and sending an annual tribute to Constantinople. The beginning of the Turkish occupation almost coincided with the first development of the Cape route, and thenceforward, for two and a half centuries, its importance as a corridor declined, as did its economic importance also under the rule of rapacious Turkish viceroys. It was for Napoleon to rediscover its value : “ Pour détruire véritablement l'Angleterre, il faut nous emparer de l'Egypte.” In 1798, realizing that its possession would give him a short land route, outflanking the British line of communication to India, he landed and defeated the Mamelukes. Shortly afterwards he received a lesson in the value of sea power ; his fleet was destroyed by Nelson ; he himself had to hasten back to France, leaving his army marooned in Egypt and destined ultimately to surrender to the British. A period of anarchy followed which ended in the rise of a capable Albanian adventurer, Muhammad Ali, who subdued the country by strong measures, conquered the Sudan (1820), advanced through Palestine and Syria, and, in 1840, was able to wring from the Sultan recognition of himself as the hereditary viceroy.

Before the conclusion of Muhammed Ali's reign (1848), the value of Egypt as a transit country had again become apparent. Lieut. Thomas Waghorn, a naval officer in the East India Company's service, organized an overland camel and dogcart route from Suez, *via* Cairo, to Alexandria, by which mails could be delivered in 1845 from London to Bombay in 30 days. Twelve years later (1857) the desert railway from Cairo to Suez was completed, and Suez had by this time become an important port. But more important still, in 1845 a concession for a transisthmian canal had been signed and it was now evident to the world that Egypt was destined to be the chief link between the western countries and the Indian Ocean. Its security and internal stability were therefore matters of vital import to the British Empire whose interests in that ocean were predominant. Indeed, our policy there has never been more clearly expressed than it was at that time by Palmerston when the Czar Nicholas proposed a partition of the Ottoman Empire, in which Britain's share would have been Egypt. "I want," he said, "a well-managed inn to serve as a half-way house on the way to my country place; but I don't want to buy the inn." In other words, the security of Egypt from external attack and from internal troubles are essential to Britain, but it is not and never has been Britain's desire to annex the country.

During the reign of Muhammed Ali's fourth successor, the Khedive Ismail (1863-1879), British and French interests in Egypt became increasingly important. Ismail impoverished the country by grandiose projects and lavish personal expenditure. His reign indeed was "like the blending of some gorgeous tale from the *Arabian Nights* with the sordid revelations of a fraudulent bankruptcy case."¹ Having exhausted all the money which could be wrung from the fellahin, he turned to French and British bankers and, in a few years, increased the Egyptian debt thirtyfold. After the Suez Canal was opened in 1869 matters became worse; his private creditors were more pressing; and in order to satisfy them he sold his shares in the Canal Company to the British Government (1875), thus making Britain the largest single shareholder in the concern. The following year he repudiated all his debts

¹ *The British Empire*, by A. F. Pollard

and the European Governments established an International Debt Commission, to safeguard the interests of the bondholders and make the payment of interest a first charge on the Egyptian revenue. This was followed by the appointment of a French and British controller of Egyptian finance.

This "Dual Control" (1876-1883) of the finances of Egypt was bitterly opposed by the military party in Egypt, led by Arabi Pasha, who saw Egyptian military establishments being "axed" and perquisites removed in the interests of economy. Riots in Alexandria (1882), and its bombardment and occupation by British naval detachments followed. The French Government, unwilling to co-operate in maintaining order, because of a feeling of insecurity with regard to Germany, left Britain "to hold the baby"; and, when open revolt against the Khedive broke out under Arabi Pasha, Britain alone sent an expeditionary force to restore order. Thus, the Dual Control was ended by France avoiding the responsibilities which it entailed; and Britain thereupon appointed herself sole financial advisor to the Egyptian Government and retained a small force in the country to ensure order and stability.

From that date (1883) onward the British Government regarded the military occupation of Egypt as a temporary measure, and were desirous of terminating it on several occasions. The course of events, however, in the Sudan prevented the termination. There in 1881, a religious teacher, Muhammad Ahmad, had proclaimed himself the Mahdi, leader of a Holy War against the "Turks"; by 1883 had overwhelmed the Egyptian garrisons, except in a few centres such as Khartoum; and in 1885—while a relief expedition under Lord Wolseley was toiling towards it—Khartoum itself fell and, with it, General Gordon who had been sent to evacuate the garrisons.

Before any attempt at reconquest could be made, a reorganization of Egyptian finances and the Egyptian Army was necessary. The first was placed in the hands of Sir Evelyn Baring (afterwards Lord Cromer). Under his autocratic but brilliantly capable and beneficent rule, financial order was produced out of chaos in almost every department; the whole irrigation system of the country was remodelled so

that it could well support at least twice the population that it indifferently supported before ; the kourbash and the corvée were abolished ; taxation was enormously reduced ; scientific research was introduced to assist agriculture ; medical facilities, hospitals, sanitation were established in the cities ; “ these and a hundred other reforms constitute a record of solid achievement which can seldom have been equalled in a like period.” Parallel to this general reorganization, there was a reorganization of the army. A British Sirdar, or commander-in-chief, was appointed, the higher commands were entrusted to British officers, and great strides were made in equipment, training, discipline and morale.

In 1896, the time was ripe for a reconquest of the Sudan. It was specially desirable because the Italian defeat by the Abyssinians at Adowa might have led to serious results in the Sudan, where the successor to the Mahdi, the Khalifa Abdullah, had long been meditating a Holy War against Egypt. Further, the French, it was discovered, were planning to seize the Southern Sudan by an advance from the west. The reconquest was accomplished by Lord Kitchener in three years. So well had the reorganization of the Egyptian Army been carried out, that the Egyptian troops gave a good account of themselves on the whole, though for the most serious part of the campaign, leading up to and including the Battle of Omdurman (Sept. 2, 1898) they required a strong stiffening of British regular troops. The recovery of the Sudan was followed by a Convention made between Great Britain and Egypt in 1899 by which it was agreed “ that the British and Egyptian flags shall be used together ” there, and that the supreme military and civil command should be vested in one officer, termed the Governor-General of the Sudan who should be appointed by Khedivial decree on the recommendation of the British Government. Henceforward, therefore, the sovereignty over the Sudan was to be shared between Britain and Egypt.

With the reconquest of the Sudan one reason for the British military occupation of Egypt had disappeared. But several others remained. Much had still to be accomplished to put the country on a proper footing. There was every likelihood that if we left, it would sink back quickly to the condition it had been in before 1883, and that some other

Power would eventually take control with results which would be fatal to British interests in the East. Germany was looking round for territory, and there was little doubt that our departure would have been rapidly followed on some pretext or other (and many would have been available) by the arrival of either French or German control. In 1904, we settled our outstanding difficulties with France (the *Entente Cordiale*) and received a free hand in Egypt in return for giving France a free hand in Morocco. We also obtained an acknowledgment of our right to choose our own date of evacuation. Egypt was at the same time released from the handicap of the International Debt Commission's control of her finances ; and from 1904 to 1914 she had a further period of quiet and of great material progress, during which the policy of increasingly associating Egyptian ministers and officials in the machinery of government was carried out.

But when the war broke out in 1914 we were faced with a curious situation. Turkey had declared against the Allies ; Egypt was still, in theory, a Turkish Province ; the Khedive was in Constantinople, where he had thrown in his lot with the Turks, and refused to return. Under these circumstances, the British Government had two alternatives. They might have annexed Egypt ; they might endeavour, on the other hand, to establish some temporary form of government which would be sufficient for war-time needs. They chose the latter course ; abolished the Turkish suzerainty ; deposed the Khedive ; proclaimed a British Protectorate and appointed a Prince of the house of Muhammed Ali as Sultan.

Towards the end of the war strong anti-British feeling made itself apparent, due partly to war-time measures which had to be imposed on Egypt, as a base of operations ; and a delegation (the *Wafd*), whose objects were "*Istiklal et tam*" (complete independence), was formed under the leadership of Saad Zaghlul Pasha, in order to lay the case of Egypt before the Peace Conference. This delegation was not permitted to go to Paris and serious rioting and a strike of Egyptian officials followed, accompanied by murders of British soldiers and civilians. Lord Milner was sent out to report on the situation and his report, though favourable on the whole to Egyptian aspirations, was badly received ; and, when it was clear to Lord Allenby, then

High Commissioner, that no settlement by agreement could be reached, the British Government decided to take action by a *unilateral* declaration. Accordingly, on February 28th, 1922, a Declaration was issued, by which the British Protectorate was terminated and Egypt was declared to be an independent Sovereign State, subject to the following matters which were absolutely reserved to the discretion of the British Government until such time as agreements might be reached with regard to them :—

- (a) The security of the communications of the British Empire in Egypt.
- (b) The defence of Egypt against all foreign aggression or interference, direct or indirect.
- (c) The protection of foreign interests in Egypt and the protection of minorities.
- (d) The Sudan.

Immediately thereafter, the Sultan took the title of King, and a new Egyptian constitution was framed on the model of the Belgian constitution.

This declaration of Egyptian independence, modified by reservations, did not satisfy the majority party in Egyptian politics, and the "Wafd" (by now the Nationalist Party), demanded the complete withdrawal of Britain. Constitutional methods of procedure were supplemented by murder and intrigue. In November, 1924, Sir Lee Stack, the Sirdar of the Egyptian Army and the Governor-General of the Sudan, was assassinated in Cairo. Previously Egyptian officers in the Sudan had been found to be conducting subversive activities. British naval and military reinforcements were dispatched to Egypt and an ultimatum presented, demanding—*inter alia*—an apology, the punishment of the assassins, the suppression of all political demonstrations, a payment of £500,000, and the withdrawal, within 24 hours, from the Sudan of all Egyptian officers, officials, and purely Egyptian units. Thus was terminated, until such time as an agreement could be reached, all active Egyptian association in the government and defence of the Sudan.

From 1924 up to 1936 no final agreement was reached

between Britain and Egypt, though undoubtedly a better feeling sprang up. For Britain, Egypt is a land through which run Imperial routes by sea and air, and the telegraph link in our cable system to the East. Hence, British military measures to protect these communications was inevitable as Egypt is incapable of giving this protection. The Egyptian standpoint was that the military occupation of Egypt made its alleged independence a farce. Further, as regards the Sudan, the Egyptian politician claimed that the Egyptian sovereignty over that country was undivided; that the Condominium was only an administrative arrangement; that it was first conquered by Egypt and later reconquered with a little British assistance, and that Egypt pays annually £750,000 towards its administration and defence. The British case was that the Sudan was never effectively controlled or governed by Egypt, that it could never have been recovered without British leadership and assistance, and that it could not be retained except by British aid.

Attempts were made in 1927, 1929 and 1930 to reach a treaty settlement on these questions, but, on each occasion, they broke down chiefly over the status of the Sudan. The British Government was willing to revert to the status preceding the ultimatum of 1924: the Egyptian representatives demanded that this status should be open to review within a short period. Finally, however, in 1936, negotiations were successful—a fact no doubt partly due to the apprehensions created by the Italian conquest of Abyssinia—and a treaty (The Anglo-Egyptian Treaty) was signed. By this treaty the British garrison is to be confined to a definite area away from the chief centres of population and in the neighbourhood of the Canal. In a later section the terms of this treaty, and particularly the effects of terminating the British military occupation of Cairo and concentrating the British forces in a Canal zone, will be examined more fully.

EGYPT

The eastern land boundary of Egypt runs from Kelaat on the Gulf of Aqaba to Rafa, 18 miles east of El Arish. The western boundary which separates it from Tripoli was modified in 1926 so as to transfer to Italy the oasis of Jarabub, the

*Boundaries
and physical
features*

religious centre of the Senussi. The southern boundary is Lat. 22° N., which runs a little to the north of Wadi Halfa and separates Egypt from the Sudan. Though the nominal area of the country, including the Sinai Peninsula, is 383,000 square miles, the cultivated and settled region of the Nile Valley, Delta and oases covers only 13,600 square miles. This region has been aptly described as like a wine glass, in which the goblet is the Delta and the stem is the Nile Valley; at the junction of the goblet and stem is Cairo, the capital. The Libyan Desert, a great limestone plateau almost completely deserted except at a few oases, lies to the west of this fertile region; on its east is the Eastern or Nubian Desert, a mass of desolate rugged mountains extending north-westwards from Abyssinia, and continued in a detached mass in the Sinai Peninsula; farther north-east this rugged country changes to the sandy and gravel desert which extends from the Nile Delta to the border of Palestine.

The Nile The Nile, the only source of water in an almost rainless country, runs through a valley which varies in width from half a mile to ten miles, and is enclosed on both sides by a line of cliffs for the greater part of its way. The fertile and densely-populated lands of the Valley occupy the region between the river and the cliffs and are irrigated by the Nile and subsidiary canals. At Cairo, this corridor spreads out into the delta, the richest and most densely-populated part of the country. The annual flooding of the river is the chief event in the Egyptian calendar. The rise begins in Upper Egypt (Egypt south of Cairo) about the middle of June, when the flood water coming from the Abyssinian mountains by the Atbara and the Blue Nile first makes its appearance, and continues until September. In order to conserve a supply of water for the remainder of the year and make it available for irrigation, the great Aswan dam and barrages at Rosetta, Damietta, Zifta, Cairo (the delta barrage), Assiut, Nag Hammadi and Esna, have been constructed, and, by artificial channels, water can be supplied to the fields when it is required.

Population The population of Egypt is about 14,500,000, of whom about 60 per cent. live in Lower Egypt, north of Cairo. Ninety-three per cent. of the total population are Moham-

medans in religion and by race a mixture of Arab and Turkish blood with a blend of the ancient Egyptian. The next most important section are the Copts, the descendants of those ancient Egyptians who adopted Christianity and who have maintained to a considerable extent their racial purity. They number about one million. Next there are the Bedouin who live on the margin of the cultivated area, all Arab and Mohammedan, but who number only about 40,000; and finally, between Wadi Halfa and the Sudan there are Nubians of Hamitic origin, totally distinct from all the others. There are also about 200,000 Europeans, who live mainly in Alexandria, Cairo and the canal towns. Apart from the last two small sections, the population is strikingly homogeneous, considering the variety of races which has occupied Egypt in the past.

The principal towns are Cairo (1,065,000), Alexandria (573,000), Port Said (105,000), Tanta (90,000) and Mansura (64,000); and there is a total town population of about 3 millions. Of the remainder, the Egyptian Fellahin or cultivators, who number about 9 millions, form much the largest section of the whole community. Simple and kindly, they are also ignorant, illiterate and easily swayed by emotional appeals. Indeed, of the whole population of Egypt only about 8 per cent. can read or write—a fact which alone shows the smallness of the class from which those who take the forefront in political affairs are drawn. This class, needless to say, belongs mainly to the cities and larger towns.

Cotton is the chief product, and its quality is equal to that of the best American. Indeed, Egypt, in normal years, supplies about one-fifth of the requirements of the British market in raw cotton and a larger proportion of our requirements of cotton seed and oil-seed cake. There is also generally a surplus of wheat, vegetables (particularly onions) and eggs for export. Almost every year sees the development of further irrigation schemes to increase the acreage under cultivation. Thus, since it was originally erected, the Aswân dam has been raised by 6 metres with the result that its capacity has been more than doubled, and later it was further heightened by 7 metres. The Nag Hammadi barrage, 367 miles south of Cairo, opened in 1930, added almost

Resources
(i) *Agriculture*

600,000 acres for the cultivation of cotton and will eventually add another 500,000 acres.

- (ii) *Mineral* Egypt is not wealthy in minerals. No coal is mined and the requirements of shipping are imported chiefly from Britain. There is little iron ore, except manganese iron ore found near the Gulf of Suez. There are, however, considerable resources of phosphate rock; and the oilfields at Gemseh and Hurghada near Suez produce a small but useful supply of petroleum which is refined at Suez and is available for shipping there.

Communications
(i) *Ports* The only ports of importance are Alexandria which has the best equipped harbour in North Africa; Port Said, and Port Fuad at the northern end of the Suez Canal, and Suez and Port Taufiq (Tewfik) at its southern end.

- (ii) *Railways* Cairo, by reason of its situation at the apex of the Delta, is the hub of the railway communications of Egypt. From it radiate lines northward, to Alexandria, Damietta and Zagazig; southwards, to Helwan (an air station about 20 miles south of Cairo on the east bank) and the line which follows the west bank of the Nile southwards to a terminus at Shellal near Aswân. From Zagazig runs the important line to Ismailia which there branches north and south to Port Said and Suez, and, by a ferry at El Kantara, makes connection with the Sinai railway constructed during the war, which runs to Palestine. The recently completed railway from Alexandria to Mersa Matruh, about 200 miles to the west and 150 miles from the Libyan frontier is obviously of great strategic importance. All the lines are of standard gauge (4 ft. 8½ in.), except an offshoot to the western oasis of Kharga, which is 2 ft. 5½ in.

- (iii) *Air* The importance of Egypt in relation to Imperial air routes has been referred to (page 186). Abukir (Alexandria), Heliopolis (Cairo), Helwan, Abu Sueir and Moascar have important air ports, and at the last there is the mooring mast which was erected in preparation for the R101.

- (iv) *Telegraph* Apart from the local telegraph and telephone systems there are two overland connecting links, between the British cable systems in the Mediterranean and the Red Sea, viz., the overland lines from Alexandria *via* Cairo to Suez and from Port Said to Suez, both of which belong to the Eastern

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Associated Cables Company (Cable and Wireless, Ltd.).

Water communications play a very important part in Egypt, ^{(v) River} and would be useful as subsidiary lines of communication in case of military operations. The Nile is the main route, and produce is carried on it from the different towns by numerous sailing boats and steamers. It flows from south to north, while the prevailing wind in Egypt blows from north to south, so that sailing vessels can sail up the river with the wind and then lower their sails to drift down with the current. It communicates with the Mediterranean Sea by its two main branches at Rosetta and Damietta, but on account of the quantity of mud suspended in the river, and deposited at its junction with the sea, the depth of the water over the bar is small, and only vessels of shallow draft can enter. When the river is low, entrance is completely prevented because the river water is used for the irrigation of the Delta, and barrages at the mouth of each arm are then closed. From Cairo to Aswân the Nile is a cheap and efficient means of transport. At Aswân it enters a narrow gorge where there are three miles of rapids, which can now be passed by means of a lock: and thence, to the Second Cataract, south of Wadi Halfa, there is another long navigable reach.

In the Nile Delta there are a number of important canals ^{(vi) Canals} which are used partly for navigation and partly for supplying water to irrigate the land. In this connection, the Mahmudia Canal leading from the Rosetta branch to the city of Alexandria requires mention, as it provides, not only an inland waterway to the town, but also the water supply. The Fresh-Water-Canal from the Nile near Cairo to Ismailia is of particular importance as the normal source of water supply for the canal towns, such as Ismailia, Port Said and Suez.

THE SUEZ CANAL

From an Imperial standpoint, Egypt's chief importance at present is in relation to the Suez Canal.

This Canal, built between 1860 and 1869, is the property of the Suez Canal Company (Paris), in which the British Government holds $\frac{1}{3}$ of the shares and on whose board there are ten British directors, of whom three are representatives of

the British Government.¹ The concession of land and rights obtained by the company from the Egyptian Government expires in 1968. If, at that date, the Egyptian government decides not to renew the concession, the compensation to the company is to be decided by negotiation.

In 1888, by a convention made between Great Britain, Germany, Austria-Hungary, Spain, France, Italy, the Netherlands, Russia and Turkey, these powers agreed that the Canal should be free and open in time of peace or war to vessels of commerce or war, without distinction of flag. They agreed also not in any way to interfere with its use or obstruct or blockade it, or its ports of access, within a radius of three miles from those ports.

The total length from Port Said to Port Taufiq is 87 nautical (101 land) miles. At the northern end lies Port Said, where a large breakwater has been built to prevent the harbour from being silted up by the mud which is brought by a current that sweeps eastward past the delta of the Nile. Along the western side of the canal runs the railway from Port Said, through Ismailia, to Suez. From Ismailia a line runs westward to Cairo and Alexandria; and at El Kantara there is a ferry and truck transporter connecting with the line, constructed during the war, which follows the old coast route along the north of the Sinai Peninsula through El Arish and Rafa to Gaza, to connect up with the Palestine railways. Further, the Fresh-Water Canal runs from the Nile to Ismailia and thence to Suez and Port Said parallel to the Suez Canal, conveying the fresh water required by the Canal towns.

During recent years, the Canal has been greatly improved. Bends have been straightened. It has been deepened so that it can take vessels up to 33 feet draught. Its width is now 198 feet. The whole system is lighted by electricity. Every 10 kilometres there is a station which telephones to headquarters at Port Said, Ismailia and Suez the details of the ships that pass, the currents, winds, etc., so that the navigation staff can regulate the traffic and send instructions to the Canal pilots on the vessels. The average time of transit is now about 15 hours, but the journey is frequently done in a shorter time, owing to the better organization, increased width

¹ The present value of the British shares is about £50 millions. Some Egyptian directors have recently been added

(which allows smaller ships to pass without one of them pulling into the bank), and the surfacing of the sides with stone or concrete.

PROBLEMS OF DEFENCE

Three of the four reservations, in declaring the independent status of Egypt in 1922, made clear the chief interests and responsibilities of the British Empire within Egypt. It is a corridor through which pass Imperial communications between Britain and nearly 400 million people of the British Empire. Through it runs the Suez Canal: over it pass the air routes to the Cape and the Far East; across it, from Alexandria *via* Cairo to Suez and also from Port Said to Suez lie the telegraph lines which connect our cable systems in the Mediterranean and Red Sea. The security of these Imperial communications is one of the first responsibilities of the defence forces of the Empire. It is evident that this security might be endangered by attack from without or by internal disturbance.

Security from attack is partly a naval and partly a land and air problem. Obviously, unless the British navy can maintain the sea routes by the Mediterranean and Red Sea, by which reinforcements and supplies can be moved to Egypt, the British and Egyptian forces in Egypt could not for long withstand an attack by a first-class European Power able to control the Mediterranean sufficiently to move its forces to North Africa. Conversely, if Britain could move its forces and could close the sea routes of an enemy Power then there could be no doubt of the issue. But neither of these extreme cases would be likely to exist at the beginning of a war. British routes would no doubt be severely harassed but not cut; enemy movements would not be completely stopped; and, therefore, the possibility of immediate land and air attack on Egypt and the Suez Canal as part of the enemy's plan to gain control of the Mediterranean by a quick success must be taken into account.

As regards land attack our mandate for and occupation of Palestine ensures at least that no danger from that side can develop rapidly. The proximity, however, of Libya presents a more serious problem. But in this case the Libyan desert is a formidable obstacle, and lines of advance, even for a highly

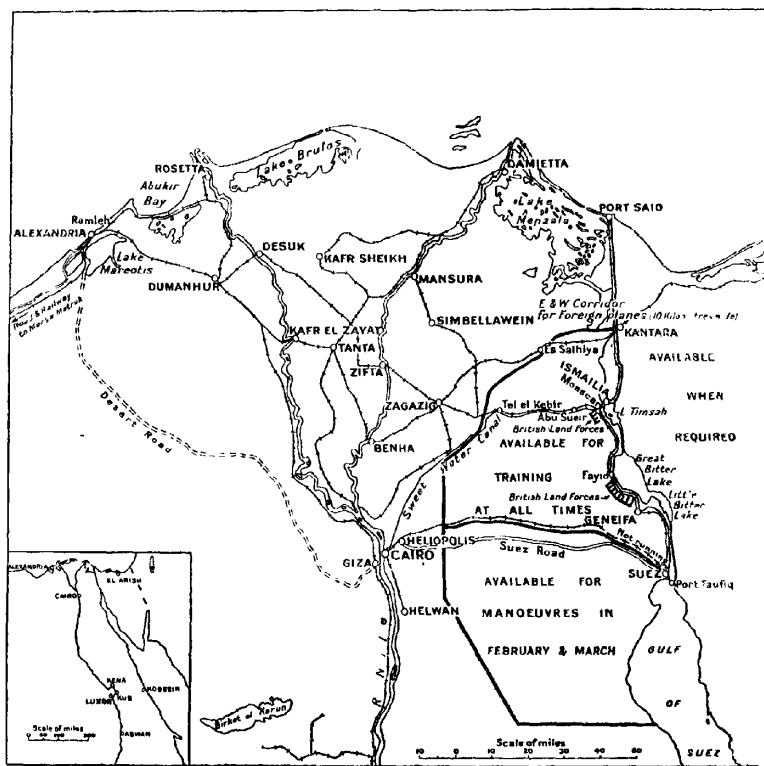
mechanized force, are limited by the problem of water supplies. The most practicable path is the coastal route, through Mersa Matruh to Alexandria, a route in which sea and air power must play an important part. Alternative routes further south, using oases such as Jarabub and Siwa would be very much longer and would entail great difficulties for the invading force which would be pinned to a long and definite desert route, the oases on which are spaced over 200 miles apart.

Air attack on Alexandria, Cairo and the Canal is possible for long range aircraft based on Syria or the Dodecanese, and more seriously possible from Libya. By air Alexandria is only 300 miles and Port Said 445 miles from the eastern boundary of Libya.

For these reasons the importance of the new military and air station at Mersa Matruh and of the railway and road from Alexandria to it can hardly be over-estimated. Hence the clause in the Anglo-Egyptian Treaty which commits the responsibility for the maintenance of this railway to the Egyptian Government is of great importance.

Security from internal disturbance is another problem of defence which must be taken into account. Disorder within Egypt might lead to foreign intervention, if British forces were withdrawn, and this, in turn, would involve the British Empire which could not risk the danger of another Power occupying Egypt. Alternatively, the disorder might lead to sabotage, the destruction of British trade and financial interests, the insecurity of Imperial communications, and damage to the Suez Canal as by the sinking of a large ship in its waters. Clearly, the responsibility for maintaining internal security is mainly a military one, shared by the British and Egyptian forces.

In this connection, the importance of Cairo must be emphasized. Not merely is it the capital and the greatest centre of population, but it is also the academic seat of Moslem learning for the world, and events there are watched with interest by the whole Mohammedan world from Nigeria to southern China. Through it runs one of the connecting links of our Imperial cable system, and from the Nile close by starts the Ismailia Canal which brings the fresh-water supply to the



Map 23, Map of Lower Egypt and Suez Canal

Canal towns. It is the key to the railway communications of Egypt ; it is the northern terminus of traffic on the Nile. Only a few miles north of it is the Delta Barrage which controls the water supply for the irrigation of the Delta in which live 60 per cent. of the population. It is the chief focus of internal security problems and the strategic centre of the whole of Egypt. This explains the fact that approximately three-quarters of the British military garrison in Egypt has been concentrated up to now in and round Cairo.

THE DEFENCE FORCES

(i) *The Egyptian Army*

The Egyptian Army consists of 3 Brigades of Infantry (11 battalions), 2 Squadrons of Cavalry, and 5 Batteries of Artillery ; and, in addition, a special regular force which comes under the Frontier Districts Administration. Service in the Army is compulsory in principle but only about 4 per cent. of those liable are called up for service. Its present strength is about 12,500 (now being increased to 20,000).

(ii) *The British Army*

The British garrison consists at present of 3 regiments of mechanised Cavalry, 3 batteries R.H.A., 3 field batteries, 6 battalions of Infantry and 1 Light Tank Battalion, organized into a Mobile Brigade (Cairo), the Cairo Infantry Brigade, and the Canal Brigade (Ismailia).

(iii) *Air Force*

Cairo is still the Headquarters and Aboukir is the Depot of the Royal Air Force, Middle-East Command, which includes Egypt, the Sudan, Palestine and Transjordan. At Heliopolis (Cairo) there is one Army Co-operation Squadron and one Bomber Transport Squadron ; at Helwan one Bomber Squadron and another at Ismailia. Thus, approximately, as is the case with the British military force, three-quarters of the total strength is, at present, concentrated in the neighbourhood of Cairo and only one quarter near the Suez Canal.

THE ANGLO-EGYPTIAN TREATY

But great alterations in the disposition of these forces have been rendered necessary by the Anglo-Egyptian Treaty of 1936, the substance of which is as follows :—

(1) The military occupation of Egypt to be terminated. The British representative in Egypt will henceforward be an Ambassador (and not a High Commissioner) and there will be an Egyptian Ambassador in

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London. Egypt will apply, and Great Britain will support the application, for membership of the League.¹

(2) A permanent alliance between Great Britain and Egypt. Should any dispute arise likely to lead to a rupture with another Power, the two allies will consult each other with a view to its peaceful settlement. If, however, the dispute leads to war or imminent menace of war, each ally will come to the assistance of the other. The assistance which Egypt will give will include the use of Egyptian ports, aerodromes and means of communication and such measures as martial law and an effective censorship as will be necessary.

(3) In view of the fact that the Suez Canal, whilst being an integral part of Egypt, is a universal means of communication and an essential link between the parts of the British Empire, Great Britain is authorized to station forces in the Canal zone to ensure, in co-operation with the Egyptian forces, the defence of the Canal. At the end of twenty years, the question whether the presence of British forces is no longer necessary owing to the fact that the Egyptian Army is in a position to ensure by its own resources the security of the Canal will be considered and, if agreement cannot be reached, will be submitted to the Council of the League or to arbitration.

(4) The numbers of the British forces will be 10,000 (land forces) and of the air forces 400 pilots, together with the necessary ancillary personnel for administrative and technical duties as well as civilians, *e.g.*, clerks, artisans and labourers.

(5) The British forces will be distributed as follows. (a) Land forces. In Moascar and the Geneifa area (between Geneifa and Fayid to a depth of 3 km. from the shore of the Great Bitter Lake); (b) Air Forces. Within 5 miles of the Port Said-Suez railway from Kantara to Suez, together with an extension along the Ismailia-Cairo railway to include Abu Sueir and its satellite landing grounds, together with areas suitable for air firing and bombing ranges which may have to be placed east of the Canal.

(6) For training purposes throughout the year British forces can use the following areas.

(a) West of the Canal. From Kantara in the north to the Suez-Cairo railway in the south and as far as Long 31° 30' E, exclusive of all cultivation.

(b) East of the Canal as required.

For annual manoeuvres in February and March they can use the area south of the Suez-Cairo railway, which is marked on the map.

The British military authorities shall be at liberty to request permission from the Egyptian government to send parties of officers in civilian clothes to the Western Desert to study the ground and draw up tactical schemes. This permission shall not be unreasonably withheld.

(7) In the localities specified in (5) the Egyptian government will provide the land, will construct barracks, playing fields, etc., and an emergency water supply. They will also provide a site for the erection of a convalescent camp on the Mediterranean coast (probably at El Arish).

(8) In order to bring the means of communication in Egypt up to modern strategic requirements, the Egyptian government will construct and maintain the following roads, bridges and railways:

(a) Roads.

(i) Ismailia-Alexandria, *via* Tel-el-Kebir, Zagazig, Zifa, Tanta, Kafr-el-Zayat, Damanshour.

(ii) Ismailia-Cairo, *via* Tel-el-Kebir and thence continuing along the Sweet Water Canal to Heliopolis.

(iii) Port Said-Ismailia-Suez.

¹ Egypt is now a member of the League.

(iv) A link between the south end of the Great Bitter Lake and the Cairo-Suez road, about 15 miles west of Suez.

These will be 20 feet wide, have by-passes round villages and be permanently utilizable for military traffic.

Similar roads will be constructed and maintained by the Egyptian Government; (i) from Cairo south along the Nile to Kena and Kus, (ii) from Kus to Kosseir; (iii) from Kena to Hurghada

The Egyptian Government will improve the following roads up to the standard specified; (i) Cairo-Suez, (ii) Cairo-Alexandria, *via* Giza and the desert, (iii) Alexandria-Mersa Matruh.

(b) Railways

(i) Railway facilities in the Canal zone will be increased and improved to meet the needs of the increased garrison and to provide for rapid entrainment, etc., (ii) The line between Zagazig and Tanta will be doubled, (iii) The Alexandria-Mersa Matruh line will be improved and made permanent.

(9) British forces may remain at Alexandria for a period not exceeding eight years, this being the approximate period considered necessary for the construction of the barracks, roads, railways, etc., already mentioned

(10) British and Egyptian Aircraft, military and civil, can fly over the Canal zone. Foreign aircraft will be prohibited from flying over the Canal and within 20 kilometres on each side of it, except for the purpose of passage from east to west, or vice versa, by means of a corridor 10 kilometres wide at Kantara.

British military aircraft will be accorded permission to fly wherever they consider it necessary for the purpose of training. Reciprocal treatment will be accorded to Egyptian Air Forces in British territory. Adequate landing grounds and seaplane anchorages will be maintained by the Egyptian Government and will be available to British aircraft.

(11) The responsibility for the lives and property of foreigners in Egypt devolves exclusively on the Egyptian Government.

(12) Great Britain will support Egypt in bringing about, by agreement with the various Powers, the speedy abolition of the Capitulations and other restrictions on full Egyptian sovereignty.¹

(13) The Sudan will, henceforward, be a Condominium in practice as well as theory, *i.e.*, Egyptian troops and civil servants as well as British troops and civil servants will be employed there. Egyptian immigration into the Sudan will be unrestricted except for reasons of public order and health.

(14) British personnel will be withdrawn from the Egyptian Army, but a British Military Mission will advise the Egyptian Government for such time as may be necessary. Egyptian personnel may be trained in British military establishments. Similarity of equipment and armament between the British and Egyptian forces will be maintained in order to make co-operation as effective as possible.

RESULTS OF THE NEW TREATY

Thus, within eight years, the British forces in Egypt will be removed—provided the barracks, water supply, etc., are ready—to a Canal zone between Kantara and the south-west corner of the Great Bitter Lake, and chiefly concentrated in the neighbourhood of Moascar and Geneifa. For the purpose of training and manœuvres they can go as far west as Long. 31°

¹ A Conference of the interested Powers was held in Montreux in 1937. Capitulations were to be abolished and mixed tribunals for the trial of foreigners are gradually to disappear.

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30' ; as far south as Lat. $29^{\circ} 52'$ and as far east (in the Sinai peninsula) as they like. In order that they can move quickly to Cairo, Alexandria and Mersa Matruh in the case of urgent necessity, the Egyptian Government promises to maintain the roads mentioned and important railways such as the line from Alexandria to Mersa Matruh. The projected road from Cairo to Kena and Kus, with their offshoots to Hurghada and Kosseir, will give possible shorter routes by which reinforcements coming up the Red Sea from the East can reach Cairo. The Egyptian army is associated with the British garrison in the defence of Egypt and the Suez Canal, and at the same time is to be relieved of British control, though its staff will be assisted—if desired—by a British Military Mission. The Sudan becomes a Condominium in practice as well as in theory. Egypt's independence is no longer shackled by reservations and it has become a member of the League. It is now a permanent ally of Great Britain.

These, in short, are the terms, easy to criticize on the grounds that treaties are frequently broken nowadays ; that Great Britain loses control of Cairo, the strategic key ; that Egyptian administration may be inefficient when relieved of British supervision, and that the programme of roads and railways may not be effectively carried out. On the other hand, however, it is evident that a friendly ally is better than a hostile or discontented dependent and that the removal of the reservations, the restoration of the Condominium status of the Sudan and the transfer of British forces to the Canal zone, are likely to diminish rather than intensify our internal security problems. Further, a mobile force could reach Cairo from the Canal zone in a few hours (52 miles) ; while in the event of danger of invasion from the west the British force will not be seriously handicapped by being initially in the Canal zone. But it is clear that this will depend on adequate roads and railways for the movement not merely of the forces but also of their supplies, as the danger of air attack on a few congested lines of communication might prove fatal to mobility.

THE ANGLO-EGYPTIAN SUDAN

The Anglo-Egyptian Sudan is separated from Egypt by Latitude 22° N. Its area is about one million square miles ;

its length from Wadi Halfa to Uganda is 1,650 square miles and through it runs the Nile for over 2,000 miles of its course. To the west of the great basin of the Nile lies the edge of the Sahara and the Nuba Hills of Central Kordofan; to the east there are the Red Sea Hills and the mountains of the Abyssinian plateau; to the south there are the highlands of Equatorial Africa.

The Nile

The river system of the Nile and its tributaries can be divided as follows:—

(a) Rivers which bring their supply from Central Africa.—The Bahr-el-Gebel and Bahr-el-Ghazal which unite to form the White Nile.

(b) Rivers which bring a flood supply of water from Abyssinia.—The Blue Nile, Sobat and Atbara.

The first groups are fed by the tropical rains of equatorial Africa and supply practically all the constant low water supply of the Nile. The rivers of the second group, which rise in the Abyssinian highlands, obtain their water from seasonal rains and furnish a great supply of flood water. The flooding of the Sobat (the most southerly of these tributaries) occurs first, about the middle of April, that of the Blue Nile about a month later, and that of the Atbara later still. The combined flood reaches its maximum at Wadi Halfa towards the end of June and at Cairo towards the end of September.

The more important of the two chief sources of the perennial supply is the Bahr-el-Gebel which emerges from Lake Albert and enters the Sudan at Nimule. From here northwards to Lake No, its course winds through a swamp belt in which its channel is very badly defined. This region, known as the "Sudd," is produced by masses of reeds and other river vegetation breaking loose from the banks and floating down stream with attached soil, until they meet some obstruction against which they lodge and form a natural dam or barrier, which eventually causes the flooding of the low-lying ground. Vast areas are, by this process, flooded, and much of the perennial supply of water wasted by dissipation over the area and subsequently by evaporation. Further, it is a disadvantage to navigation and the river can only be kept open by shifting these floating blocks before they accumulate sufficiently to form a barrier. At Lake No, the Bahr-el-Gebel

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and Bahr-el-Ghazal unite to form the White Nile which then flows east until joined by the Sobat. Thence, it turns north and is joined by the Blue Nile at Khartum and the Atbara near Berbera.

The climate is severely tropical, the daily mean temperature *Climate* varying at Khartum between 70° and 92°. Rainfall can best be described with reference to three regions : a northern region, extending from Egypt to the latitude of Khartum, is practically rainless except on the shores of the Red Sea; a central region, south of Khartum to Lake No, receives a south-west monsoon for the three summer months, bringing about five inches of rain and followed by drought, while farther south the rains are heavier and last longer, until near Uganda a region is reached where rain falls every month, the heaviest falls occurring in May and October, and the average for the year amounting to 38 inches.

Corresponding to these regions there are three distinct areas of vegetation which merge from one into another.

(1) The northern or desert region, north of Khartum.

(2) The middle or grassland region, from the latitude of Khartum to Lat. 10° N., in which the rainfall is not sufficient for tree growth, except along the courses of rivers and streams. This includes the plains of Darfur, Kordofan and Sennar.

(3) The southern region of tropical swamp and jungle south of Lat. 10° N.

The population of the Sudan is estimated at 5,600,000 of *Population* whom about 50,000 are in Khartum and 104,000 in Omdurman, the old capital. In the region north of Khartum there are Arab tribes such as the Kababish, and the settled population along the valley is mixed Nubian and negroid. In the middle region, between Khartum and Latitude 10° N. there is a mixture of negroid races and of native tribes like the Baggara who profess Mohammedanism. South of Latitude 10°, in the swamp belt between the branches of the White Nile, live primitive tribes like the Dinkas, Annuah and Nuers; and, farther south, the inhabitants are negroes of Central African types. "We have, in fact, in the Sudan, at least three regions quite different in character, of which only the northern-

most and least potentially important has any resemblance to Egypt itself. . . ."¹

Resources

The chief exports are gum arabic (the Sudan is the world's chief source of supply), rubber, cotton, cattle and ivory. Iron ore and copper exist in considerable quantities, and are worked in a primitive way but not on a large scale.

Cotton is the commodity most likely to be developed in the immediate future. The variety produced in the Sudan is of excellent quality and suitable for British manufacturers, and its development is consequently being strongly encouraged by the British Cotton Growers' Association. Two enterprises, in particular, deserve notice. The first is the Gezira Irrigation dam at Makwar across the Blue Nile, 170 miles south of Khartum, which makes it possible to irrigate for cotton growing 300,000 acres of land in the delta between the Blue and White Niles (the Gezira). The second is the development of the area between the branches of the River Gash (the Gash Delta), which has been carried out by the Kassala Cotton Company. Irrigation flood works have been constructed in this area, and over 100,000 acres have been made productive for cotton growing.

Other important schemes are contemplated. Work on a dam at Gebel Aulia, 29 miles south of Khartum, on the White Nile, has been completed, and projects with regard to conserving the water supply of Lake Albert are under consideration at present.

*Communica-
tions*
(i) *River*

North of Khartum the Nile has long navigable stretches broken by the various cataracts and rapids. South of Khartum the cataracts cease and conditions of navigation are on the whole better. At flood time, the Blue Nile is navigable up to the Abyssinian frontier, but its water is dependent largely on the rain in the Abyssinian mountains, and steamers can only ascend for a limited distance after December. In the same way, the Atbara in the summer time becomes a series of pools, and is of no use for transport during that season. The White Nile, on the other hand, which receives a fairly constant supply from Lake Albert throughout the year, is always navigable and Government steamers run regularly between Khartum and Rajaf, *via* Kodok.

¹ *Egypt*, by G. Young, 1927. (Benn.)

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The Sudan railway runs from Wadi Halfa through Khartum ^{(ii) Rail} to Sennar where it curves round in a westerly direction to the terminus at El Obeid. Offshoots run from Wadi Halfa to Kerma at the third cataract; from Abu Hamad to Merowi; and from Atbara junction to Port Sudan and Suakin. An important line runs also from Sennar, *via* Gedaref and Kassala, to Haiya on the Atbara-Port Sudan railway. This line provides a shorter route between Kordofan and the Red Sea: it taps the Gezirah and Gash Delta cotton areas; and it is near enough to the Abyssinian frontier to tap that region also. From Khartum to Wadi Halfa by rail is about 600 miles and the journey is done in about twenty-five hours; from Port Sudan to Atbara (300 miles) takes about eighteen hours.

The Imperial air route to the Cape traverses the Sudan ^{(iii) Air Routes} and provides a fast mail service for passengers and letters. The official stopping-places are Wadi Halfa, Khartum, Kosti, Malakal and Juba. From Cairo to Khartum takes $1\frac{1}{4}$ days (day flying only). Khartum is the junction for a branch route to Kano in Nigeria, over which a weekly service is maintained *via* El Obeid and El Fasher.

In the northern and central regions there are many caravan ^{(iv) Caravan routes and roads} routes which now serve as feeders for the railway and river communications; in the southern region human portage is the only form of transport. The important motor road from Mongalla to Nairobi which connects the Kenya-Uganda Railway with the Nile steamer service has already been mentioned. From Juba there is a motor transport service to the Belgian Congo.

Port Sudan is the only port of importance and is now well ^{(v) Ports} equipped. Suakin is merely a harbour for small fishing craft.

DEFENCE AND DEFENCE FORCES

The responsibilities of the defence forces in the Sudan are the defence of the region against attack on its frontiers and the prevention of tribal trouble or insurrection. With regard to the first, the Abyssinian frontier, 800 miles long, is the only one on which trouble might be anticipated. The likelihood of tribal insurrection and internal security problems arising on a large scale is gradually decreasing, but, in the past, this type of problem was prominent, and various expeditions had to be

conducted, such as those against the tribesmen of the Nuba Hills in 1908, 1909, 1910 and 1911, and against Ali Dinar, the Sultan of Darfur in 1916. The maintenance of law and order and swift punishment for the transgressor are, however, responsibilities which are constant.

*The Sudan
Defence
Force*

The local force, whose duties are the above, is the Sudan Defence Force, which came into existence in 1925 to replace the Egyptian units which were withdrawn after the murder of Sir Lee Stack.

It is distributed over the following military areas :—

1. The Northern Area.—Headquarters, Khartum.
2. The Central Area.—Headquarters, El Obeid. This includes the Kordofan Province.
3. The Eastern Area.—Headquarters, Gedaref. This includes the Kassala and Fung Provinces.
4. The Western Area.—Headquarters, El Fasher. This includes Darfur.
5. The Southern Area.—Headquarters, Torit. This includes the Mongalla and Bahr el Ghazal Provinces.

The total strength of the whole force is about 4,800. Enlistment is generally for a period of 3 years, and the force consists approximately of 50 per cent. Arabs, 30 per cent. Sudanese, and 20 per cent. Equatorial races. British officers are seconded for service with it; native officers are promoted from the ranks. The men receive a consolidated rate of pay, out of which they supply their own food and accommodation. On active service, however, the soldier receives a ration of dura (millet) and also meat if available.

*The British
Forces*

The British garrison in the Sudan consists of two battalions together with a detachment R.A. One battalion is stationed at Khartum, the other has its headquarters and two companies at Khartum, one company at Atbara, and one company at Gebeit in the Red Sea hills. There is also one bomber squadron R.A.F. at Khartum.

The functions of this British force are the protection of the government at Khartum and of the railway from Khartum to Port Sudan; and also to assist the Sudan Defence Force in any operations where they need a backing.

THE SUDAN AND ABYSSINIA

Recent events have drawn special attention to British interests and security in North-East Africa. The Blue Nile, Atbara and Sobat derive their water from the Abyssinian highlands, and Lake Tsana the main source of the Blue Nile is specially important because its narrow and canyon-like outlet is suitable for the erection of a regulating dam. There are few other British economic interests in Abyssinia. A small British trading post has existed (by treaty with the Emperor Menelik) at Gambela near the Sudan frontier since 1902 ; some of the internal trade was in the hands of British-Indians,¹ and there is the usual trans-frontier grazing on the borders of Abyssinia and British Somaliland and Kenya.

The most important interests involved are, however, not economic. Two-thirds of Abyssinia's frontiers march with British territory and, hence, the permanent occupation of that country by a Great Power must react on the strength and disposition of the British forces in the British territories which touch it. But, most of all, the maintenance there of large Italian forces, dependent for their supplies and reinforcements on the sea route through the Suez Canal must give cause for some anxiety lest it be taken in the future as an argument for striving to obtain naval and air control over all this area ; or, alternatively, for establishing control by land of a corridor joining Libya and Abyssinia.

¹ Prior to the Italian occupation

CHAPTER XVIII

PALESTINE, IRAQ, ARABIA AND THE PERSIAN GULF.

WITHIN the oval formed by the Levant, the Aegean, the Black Sea, the Caspian, the Persian Gulf, the Arabian Sea and the Red Sea lies an area fated to play an important part in world relations. It is central to Europe, Asia and Africa. Through it stretch the shortest routes which join the great populations of the European peninsula and the Monsoon lands of Asia. Between the lines of folded mountains, which enclose the plateaus of Anatolia and Iran and the inhospitable high table-land of Arabia lies a corridor of lower ground, extending from the Levant to the Persian Gulf, which is the natural avenue for air and other communications. The Suez Canal and Red Sea run along its south-west margin ; along its eastern edge is the coastal plain of Palestine and Syria which joins Asia and Africa, the Nile and the Euphrates. Across it stretches part of the oil belt of the old world. The States which line its northern edge, Turkey, Iraq and Iran, are buffer countries, which separate Russia from the Levant and Indian Ocean.

*A brief
historical
sketch of
recent events*

The lands of the Seven Seas were until 1914, mainly under the control of Turkey. Until then, the Asiatic possessions of Turkey consisted of Asia Minor, Syria, Palestine, the three *vilayets* of Basra, Baghdad and Mosul which now comprise Iraq and the coastal strip of Arabia which is now the Kingdom of the Hejaz. In addition to these, by virtue of conquest, she claimed lordship over and revenue from the remainder of Arabia, except the Aden Protectorate, the Trucial Coast, Oman and Kuwait, where British power was paramount. Outside Asia Minor, Syria, Palestine and the larger towns of the remaining territory her administrative and political control was in reality mainly nominal. The intensely individualistic Arab tribes of Arabia and Iraq were intolerant of any political subservience and impatient of taxation ; and only by occasional punitive expeditions, a policy of subsidies to various

tribes and by playing off inter-tribal jealousies could a semblance of Turkish control be maintained. Only one real bond united part of these communities to the Turkish Empire—the fact that the Sultan of Turkey was the hereditary spiritual head or Khalif of the orthodox (Sunni) Mohammedans of the world, a bond which, however, was ineffective in the case of the many other Moslem sections of the population. In any case, this religious connection was not sufficient to ensure unity and loyalty to the Turkish Empire among Arab communities, whose extreme individualism and lack of coherence are expressed in the Arab proverb, “There is no brotherhood in Islam.”

Thus, when the Great War broke on the Moslem world, many of the Arab tribes were ready to seize it as an opportunity for securing their independence from all control. The Sherif Hussein of Mecca, the guardian of the Holy Places in the Hejaz and one of the hereditary leaders of the Arab world, and his three sons Ali, Abdulla and Faisal, gave a lead and, in 1916, negotiations were conducted between them and the British Government. These negotiations had as their aim the establishment of Arab independence in an area to the east of Palestine and Syria. In return for British assistance in achieving this end, the Sherif and his son Faisal were prepared to rally the Arabs to the Allied side and harass the exposed flank of the Turkish communications from Damascus to Medina and Mecca. Though these negotiations were inconclusive they led to a declaration of war against Turkey by the Sherif in July 1916, and to the subsequent campaigns associated with the name of Colonel Lawrence. Eventually, in 1917, the Sherif Hussein declared himself King of the Hejaz.

In the meantime (May 1916), Sir Mark Sykes and M. Picot, the former French Consul General at Beirut, representing the British and French governments respectively, had made an arrangement for the partition of the Arab territories of Turkey. Great Britain was to have southern Mesopotamia, because of its proximity to the Anglo-Persian oilfields, and a short strip of the coast of Palestine, from Haifa to Acre, in order to give an outlet on the Mediterranean for southern Mesopotamia. France was to have the northern part of Palestine and the south-eastern part of Syria. Central

Palestine, which contained Holy Places sacred to the Christian, Jewish and Mohammedan religions, was to be under some form of international control to be determined later; and all the remaining area, to the east of these territories, was to become a Federation of Arab States, or one Arab State, divided into British and French spheres of influence. No undertaking was given, at any time, that Palestine as a whole would be part of such an Arab State.

The Balfour Declaration

The future policy with regard to that country was indicated in a letter from Mr. Balfour to Lord Rothschild published on November 2nd, 1917—the day following the capture of Gaza. This statement, known as the Balfour Declaration, ran as follows :—

“His Majesty’s Government view with favour the establishment in Palestine of a National Home for the Jewish people; and will use their best endeavours to facilitate the achievement of this object, it being clearly understood that nothing should be done which may prejudice the civil and religious rights of existing non-Jewish communities in Palestine, or the rights and political status enjoyed by Jews in any other country.”

In brief, this declaration implied that Britain would encourage the establishment of Jewish colonies in the country which was so closely associated with Jewish history. It did not imply that Palestine was to become a Jewish State, an implication which would obviously have been absurd in view of the fact that the Mohammedans then outnumbered the Jews by almost eight to one.

The Peace Conference, after the war, confirmed these several arrangements in a general sense, though with minor modifications. Thus, by the Treaty of Sèvres, Great Britain was appointed Mandatory for Palestine and France for Syria, in each case the Mandate being of the “A” class, viz., relating to “countries which have reached a stage of development when their existence as independent nations can be provisionally recognized, subject to the rendering of administrative advice and assistance by the mandatory until such time as they are able to stand alone.” The principle of the Balfour Declaration with regard to Palestine was confirmed. Iraq was recognized as an independent Arab State, but was placed under the

mandate (Class A) of Great Britain until such time as it should be capable of complete self-government. Its central government was vested in King Faisal (the third son of the Sherif Hussein), who was elected King in October 1922, assisted by a Cabinet of Ministers, and advised by a British High Commissioner who represented the Mandatory Power.

Transjordan, the narrow strip of fertile country which lies between the Jordan and the Syrian and Arabian Deserts, was to be part of the Palestine mandate, but was exempted from the terms of the Balfour Declaration. It had been claimed by King Hussein of the Hejaz as part of his kingdom, and its administration had been entrusted by him to his second son, the Emir Abdulla. After various negotiations the British Government (1923), and subsequently the League of Nations, recognized Abdulla as its ruler, subject to British supervision and control as the Mandatory for Palestine and Transjordan.

In Arabia, when the war ended, the three most prominent figures were (1) Ibn Sa'ud, the Sultan of Nejd and the leader of the Wahabi sect of the Mohammedans, who throughout hostilities had been helpful to British interests and antagonistic to the Turks; (2) Hussein, King of the Hejaz, the leader of the orthodox Sunni Mohammedans who also had given assistance to the Allies but was on bad terms with Ibn Sa'ud; (3) the Imam of Sanaa, the most influential figure in Yemen, who remained loyal to the Turks and who, as spiritual head of the Zaidi section of Mohammedans, was strongly opposed on religious, as well as on political ground, to both Ibn Sa'ud and Hussein. These three personages, mutually antagonistic, were the rulers of all Arabia except those parts which were under British protection, viz., Aden, Oman, the Trucial Coast and Kuwait.

This was the situation in 1923 when Turkey, which had refused to accept the terms of the Treaty of Sèvres, finally renounced, by the Treaty of Lausanne, her rights and titles in Palestine, Syria, Egypt, the Sudan, Cyprus and Iraq. In this Treaty, also, she agreed that the disputed northern boundary of Iraq should be settled by friendly agreement with Great Britain or alternatively that the question should be referred to the League of Nations. This latter course

subsequently became necessary, and the award known as the "Brussels line" was given in 1925 and accepted by all parties. Since then, no serious issue has disturbed the relations between Turkey, and Great Britain or Iraq.

The period has, however, witnessed the elimination of the Hejaz as a separate state. In 1924 the Turkish National Assembly at Angora declared against the continuance of the Kalifate as a hereditary office held by the Turkish ruler. King Hussein of the Hejaz immediately laid claim to the title of Khalif and so attracted the attention and increased the hostility of Ibn Sa'ud, the leader of the Wahābi section of Islam and Sultan of Nejd. Ibn Sa'ud attacked Hussein and in less than six months had ejected him from Mecca; and Hussein thereupon abdicated in favour of his son Ali. Ali, however, was in turn ejected; all opposition in the Hejaz was forcibly overcome and Ibn Sa'ud was declared King. His rule, at least nominally, thereafter extended from El Hasa on the Persian Gulf to the coast of the Hejaz on the Red Sea. Asir, which was being squeezed between the upper and nether millstones of the Hejaz and Yemen placed itself under Ibn Sa'ud's suzerainty in 1926 and was, in effect, annexed in 1930. And finally in 1934, Ibn Sa'ud inflicted a decisive defeat on the forces of Yemen, and thus emerged as the greatest figure in the Arab world of to-day, ruling a territory which marches with the British mandate of Palestine and Transjordan, the British Protected States of Kuwait and Oman, and with Iraq.

PALESTINE

Physical Features

Palestine, which lies between the Mediterranean Sea and the Syrian and Arabian deserts, is the bridge connecting the Eur-Asian and African land masses. As such, and as the only practicable corridor between the Nile and the Euphrates, it has played a part in history quite incommensurate with its size. The narrow coastal plain from the Egyptian boundary in the south to the spur of Mount Carmel near Haifa, 100 miles in length and about 15 miles in width, has been a battleground on which have been contested the destinies of many Empires; and the pass of Megiddo, through the Mt. Carmel Spur, to the Plain of Esdraelon, which runs inland from Haifa to the Jordan Valley, and thence gives access to Damas-

cus and the Euphrates, has become for humanity a symbol of universal war.

Behind this coastal plain rises the rocky plateau of Judaea 2,500 to 3,000 feet above sea level, with its important centres of Nablus, Jerusalem, Bethlehem and Hebron, for centuries the citadel of the Jewish people. At its eastern side this plateau drops suddenly to the deep depression in which lie the Jordan and the Dead Sea, a valley that extends from the Lebanon in Syria to the Gulf of Akaba and reaches its lowest point at the Dead Sea, the surface of which is 1,300 feet below sea level. Beyond this great rift in the earth's crust the ground rises quickly again to the rolling downs of Hauran, Gilead and Moab, the narrow strip of healthy, well-watered and fertile pasture between the Jordan and the desert, which forms the core of Transjordan.

The climate of the coastal plain is sub-tropical and humid *Climate* with a rainfall of 30 inches. The plateau of Judaea is drier and more temperate, the temperature running from 43° to 73°, with a rainfall of 16 inches, most of which occurs between November and April. The Jordan Valley is very hot with small rainfall, the temperature mounting from 70° to 130°. On the plateau the supply of water is an important consideration. Water for domestic use is obtained from cisterns cut out of the rock in which the rain is collected or from wells which are often of doubtful character. Jerusalem has a piped supply, pumped from the Pools of Solomon near Bethlehem.

The resources are mainly agricultural. Oranges, lemons and *Resources* grape fruit, wheat, barley, millet, tobacco and olives are grown, but the country, particularly the plateau, suffers from lack of water.¹ Various projects have been suggested from time to time to relieve this difficulty, the most important of which is a scheme for turning into the valley lands of northern Palestine some of the water from the Litani river and its tributaries. This would require co-operation with the French, through whose territory the Litani flows. Jewish colonies and agricultural settlement, partly financed by the Zionist Organization, have been established in the coastal plain, particularly round Jaffa and Caesarea, in the valley of Esdraelon and along the western

¹ Owing to the porous limestone, through which it is estimated that 99 per cent. of the rainfall is lost

side of the Sea of Galilee; and industrial enterprises, such as cigarette factories at Jaffa and Haifa, and oil and flour mills at Haifa, have followed. The considerable drop in the Jordan between the southern end of Lake Tiberias and Jisr-el-Majami, 12 kilometres to the south, is being utilized for the production of hydro-electric power on a large scale. The Palestine Potash Company, formed a few years ago to obtain various valuable chemical salts from the Dead Sea, is now producing and exporting these in considerable quantities, and when difficulties of transport are overcome, the Dead Sea may become one of the chief sources of raw material for the chemical industries of the world. The harbour of Haifa has been enlarged, a large bulk oil installation and a refinery have been erected there, and now that the oil pipe line from Iraq is working, it has become one of the most important ports in the Mediterranean.

*Communica-
tions*

The only other ports are Jaffa¹ which is still comparatively undeveloped, and Acre and Gaza which can only be used by small vessels. The railways (government owned) are :

- (1) The line from Egypt *via* Kantara East, Rafa, Ludd to Haifa, 258 miles. Standard gauge. (Kantara to Rafa is known as the Sinai Military Railway and is worked by the Palestine Government on behalf of the Air Ministry.)
- (2) Jaffa, Ludd, Jerusalem, 54 miles. Standard gauge.
- (3) Haifa, Afule, Semakh. Narrow gauge.
- (4) Haifa, Acre, 11 miles. Narrow gauge.
- (5) Afule, Nablus, Tulkeram, 61 miles. Narrow gauge.

In addition to these there is the Hejaz railway which is connected with the Palestine system by a line from Semakh to Deraa.

The Imperial Air route from Great Britain to Iraq, India and Australia, crosses Palestine, and Gaza is a stopping place.

Motor routes run from Baghdad to Haifa, conveying passengers and baggage, and a survey of a proposed railway from Iraq to the Mediterranean has been carried out.

*Population
and
Problems*

Given settled conditions, there is little doubt that Palestine would become increasingly important as a productive area, while its situation on Imperial air and motor communications ensures for it an increasing share of transit trade. Settled conditions are, however, difficult to secure owing to the con-

¹ The large Jewish city of Tel Aviv (population 150,000), close to Jaffa, is seeking to establish a harbour at the mouth of the R. Auja

flicting racial and religious elements involved. The Balfour Declaration, as endorsed by the League of Nations, provided for the facilitation of Jewish settlement and for co-operation with this end in view between the Mandatory and a public body in Palestine to be known as the Jewish Agency. The Zionist Organization, the local branch of which was recognized as the Jewish Agency, enlisted, after the war, the financial assistance of wealthy Jewry and proceeded to purchase land and establish Jewish settlements. While one result has been a definite increase in the production and prosperity of the country, in other respects the results have been less satisfactory. The purchase of land from absentee Arab landowners living in Syria has displaced Arab tenants and labourers and has given rise to unemployment which, no doubt, has been magnified for political ends. Further, the rapid increase in the Jewish population has lent colour to the Arab contention that the policy of the Balfour Declaration is, in spite of its pretensions of safeguarding Arab interests, merely a veiled method of creating a Jewish state. They quote the census figures of 1921 and 1935 to support their contention :—

		1921	<i>Per cent of total</i>	1935	<i>Per cent. of total</i>
Moslems ...	..	650,000	80.3	825,000	63.5
Jews ...	...	87,000	10.7	375,000 ¹	28.8
Christians and Others	...	73,000	9	100,000	7.7

Further, the economic and political controversies have been embittered by religious conflicts, particularly with regard to the Jewish custom of prayer at the Western Wall of the Haram el Sherif. This Western Wall is the sole remaining part of the ancient Jewish Temple of Solomon: it is the part of the outer wall which was nearest to the Holy of Holies, and as such is not merely the one visible symbol of Jewish national and religious unity but is also a place where the Divine Presence might be expected to remain. Here, particularly on the Day of Atonement each year, Jews gather to pray, weep and lament. This Western Wall is, however, also part of the Haram es Sherif, a sacred Moslem area which contains the Mosque of El Aksa and the Dome of the Rock, the third holiest shrine of Islam. Both Jews and Arabs have been intolerant of one another's customs and rights in this place. These problems and the Arab contention that promises

¹ The Jewish population now is at least 400,000.

had been given during the war, but not carried out, to make the old Turkish provinces into an Arab state have made Palestine a land where civil disturbances are frequent. In August 1929, disturbances suddenly burst into murderous activity which continued for over seven days and resulted in great loss of life. The Royal Air Force, which was the only force in Palestine apart from the police, was unable to deal with the situation. Indiscriminate bombing of the streets of Jerusalem and the other towns was out of the question; armoured cars were of little use in narrow streets, and two warships and an aircraft carrier, and a battalion from Egypt and another from Malta had to be brought before peace was again ensured. A number of investigations were conducted by the British Government and by the Permanent Mandates Commission of the League of Nations, and in 1930 the British Government issued a statement of its policy in a White Paper. The interests of Jewish and non-Jewish people in Palestine should be safeguarded, if Jewish immigration should cause Arab unemployment at any time, or if Jewish unemployment should affect the labour situation, then immigration must be suspended temporarily. A Legislative Council would be set up, composed of the High Commissioner, with ten official and twelve unofficial members (elected). Peace and order must be ensured and, hence, two battalions of British infantry would be retained in the country, in addition to the Royal Air Force; and the British section of the Palestine police would be increased.

This attempt, like preceding ones, to introduce some measure of representative institutions was, however, defeated, by the non-co-operating attitude of the Arab leaders who demanded that Palestine should be an Arab State, and by the unwillingness of the Jews to accept a minority position. Hence, the country continued to be administered by the High Commissioner, assisted by a small Executive Council of officials and, for purposes of legislation, by a nominated Advisory Council, with no executive or legislative powers.

An announcement in the early part of 1936 that the British government was about to give Palestine an instalment of self-government by the formation of a legislative council in which Moslem, Jewish and Christian interests would be represented

by communal electorates, was a signal for a renewed outbreak of serious internal trouble. The Arabs demanded complete self-government on a democratic basis, the cessation of Jewish immigration and the prohibition of the sale of land to the Jews; the Jews were unwilling to trust a legislature in which the Moslems would have more representation than themselves, even though safeguarded by the presence of certain nominated officials. Political feeling rose high; the Arabs declared a general strike which speedily developed into something little short of a serious guerilla war, in which the attitude of surrounding Arab countries, who might come to the assistance of their Palestinian co-religionists offered dangerous possibilities. The British Government, while reinforcing the garrison to 23 battalions and one mechanized cavalry regiment and suspending the "Air Control," sent a commission (under the chairmanship of Earl Peel) to investigate, report and recommend. The Royal Commission rendered a unanimous report to the effect that any further attempts to reconcile Jewish and Arab aspirations in the same area was doomed to failure. They recommended instead that the country should be divided; the northern position (Galilee) and a strip along the coast to just south of Jaffa becoming a Jewish state, which should itself be responsible for determining to what extent Jewish immigration was possible within its own area. A small area including Jerusalem, Bethlehem, Ludd and Jaffa should be a British Mandatory Enclave and Corridor; and the remainder of the country should be Arab. Occupation of land in the Jewish and Arab areas should be restricted to those nationalities respectively; and in view of the low taxable capacity of Transjordan (with which the Arab State should be united) and the considerable Arab population which it will be necessary to transfer from the Jewish state (the Commission quote, in this connection, the ultimately highly successful transfer of population between Greece and Turkey after the Treaty of Lausanne) Parliament should be asked to make a grant of £2,000,000 to the Arab state. Both Arabs and Jews naturally denounce the proposed partition as giving far less than each party considers that it has the right to demand. To this the Commission reply: "Partition seems to offer at least a chance of ultimate peace. We can see none in any other plan. . . .

If it offers neither party all it wants, it offers each what it wants most—namely freedom and security.”

It is too early as yet (August 1937) to say what view Parliament will ultimately take of the Commission's proposals; though H.M. Government appear to favour them. There is also the League of Nations to be considered, since any change in the terms of the original mandate must receive the approval of the League and the U.S.A. The League appears inclined to consider that the essential fact is that Great Britain cannot be compelled to shoulder any longer a mandate which she seems unwilling to continue in its present form. One suggestion is that Great Britain should replace her present single mandate by three separate mandates, for the Jewish state, the Arab state and the Enclave respectively, thus combining the principle of partition with the maintenance of British mandatory responsibility. It seems probable that the British garrison in Palestine will have to remain for some time to come, at its present strength of 8 battalions, in view of the political tension there.

Importance Mr. Kipling has described Palestine as “the buckle on the belt of the world.” It is central to the most central region in the eastern hemisphere. Through it run the land routes which connect Asia and Africa. It is the corridor between the Euphrates and the Nile. It gives the possibility of defence in depth against land or air attack on the Suez Canal from the north. For the British Empire it is a focal area of our air communications from Europe, India, Egypt and the Cape. Across it run motor routes which connect Iraq and the Mediterranean. The oil pipe line from the Iraq fields crosses its territory, to the great oil port of Haifa. It promises to be the chief producer of the valuable mineral salts required in agriculture and war. Its strategic importance has been accentuated by the recent increased importance of securing the British position in the Eastern Mediterranean. And finally within its 9,000 square miles are Holy Places, sacred to the Christian, Jewish and Mohammedan religions, a fact of no little significance to a Power whose territory contains great Christian and Jewish sections and also a larger number of Mohammedan peoples than any other country or Empire in the world. Indeed, perhaps the most dangerous feature of

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the present troubles in Palestine is the possibility that they might become a Pan-Moslem affair, provoking serious repercussions throughout the whole Middle East and India. So far, fortunately, this has not proved to be the case.

TRANSJORDAN

Transjordan, part of the Palestine Mandate, but administered separately and ruled by the Emir Abdulla, contains a fertile plateau between the Jordan and the desert. The breadth of the strip varies from 40 to 80 miles and its altitude from the 1,300 feet below sea level of the Dead Sea to three or four thousand feet above sea level on its rolling downs. In the north is the Hauran, a region of rich soil, of wheat fields and pastures. South of the Hauran is the plateau of the Balqa, the old land of Gilead, in which are Amman, the capital, and Es Salt. This region is noted for its herds, orchards and vineyards. South of the Balqa is the land which was once the Kingdom of Moab, a place of sheep and cattle pastures. The whole area is 8,000 square miles: its population is 260,000, almost entirely Arab and Mohammedan, the only important non-Arab section being Caucasians (Circassians) who were settled there by the Turks some fifty years ago and who now number 10,000. The Balfour Declaration does not apply to Transjordan.

The resources are agricultural, and now that protection *Resources* from raiding Bedouin is better organized, the stagnation which existed is disappearing. Transjordan is a partner with Palestine in the mineral salt resources of the Dead Sea, in virtue of its ownership of the eastern half of that sea. The Jordan hydro-electric works are at Jisr-el-Majami on the Transjordan side of the boundary. There are rich phosphate deposits near Amman and there is a possibility that there may be oil particularly near Akaba.

Transjordan is important as a buffer between the Arab *Importance* state of Nejd, with its turbulent and fanatical Wahābi tribesmen, and Palestine. Through it runs from Deraa to Mudawara a section of the Hejaz railway, the only rapid means of communication between the Hejaz and Syria. British control can therefore be exercised over this railway if necessary, and this control might be useful in case of any

trouble with Ibn Sa'ud or an attempt on the part of Syrian tribes to collaborate with Wahābite tribes in a general Arab rising against the two Mandatories, France and England. The port of Akaba which, since 1925, has been in the territory of Transjordan would also be valuable as a port of disembarkation under such circumstances, and it has been connected by a motor road through Maan to Amman, whence there is a road to Jerusalem which crosses the Jordan by the Allenby bridge. Further, the Imperial Air route to India, motor routes to Baghdad and the oil pipe line to Haifa all traverse Transjordan. There are aerodromes at Amman and Ziza (which are used by Imperial Airways, Ltd.).

THE DEFENCE OF PALESTINE AND TRANSJORDAN

The chief problems of defence are the maintenance of internal security in Palestine and the defence of Transjordan against either sporadic Arab raids or a concerted attack from Saudi Arabia. The forces available to meet these commitments, in addition to the British troops already mentioned, consist of the following.—

- (a) The Royal Air Force. One bomber squadron at Amman, and one at Gaza. Three sections of armoured cars at Ramleh¹ and one at Maan.
- (b) The Transjordan Frontier Force (strength 1,000), which has British officers and is divided into three squadrons of cavalry, two mechanized companies, and six troops reserve (dismounted). The H.Q. of the force are at Zirka near the desert frontier of Transjordan, and there are detachments at Maan in the south and at Jisr-el-Majami on the Palestine frontier in the north. Since the riots of 1929, detachments have also been stationed in Palestine at Semakh, Beisan and elsewhere. This force is for the defence of the Mandated Territory only, and cannot be used outside Palestine and Transjordan except for the defence of those countries. (Its cost is shared between the Imperial and Palestine governments.²)

¹ Halfway on the road from Jaffa to Jerusalem

² The Mandate in Article 17 contains the following "The Mandatory shall be entitled at all times to use the roads, railways and ports of Palestine for the movement of armed forces and the carriage of fuel and supplies"

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- (c) For police work in Transjordan there is the Arab Legion, 800 strong, which has a British Commandant and two Assistant Commandants, and is divided into an urban police force and a rural gendarmerie. In Palestine, there is a British police force of about 900 stationed at Jerusalem, Jaffa, Haifa and Nablus, in addition to the Palestinian police (about 2,000).

The distribution of the British forces indicates the main function of each. The Bomber squadron at Amman is placed where it can be most useful, viz., in the march lands of Transjordan where tribal raids can be discouraged by the threat of air reprisals; the British infantry and British police where internal security problems exist, which may require the intervention of land forces, and which cannot be solved by the more indiscriminating method of air attack.

IRAQ

Iraq extends over the plain of the rivers Euphrates and Tigris, the home of the ancient civilizations of Assyria and Babylon, and comprises the former Turkish *vilayets* of Mosul, Baghdad and Basra. Its eastern boundary coincides with the old Turkish-Persian boundary, which in the northern part runs through and in the southern part skirts the mountains forming the edge of the Persian plateau. On the north its province of Mosul marches with Turkish Kurdistan, from which it is separated by the "Brussels line." On the west lie Syria and Transjordan. On the south it is bounded by Kuwait and the Persian Gulf.

It can be divided into three main regions, the Plain, the Uplands and the Highlands. The Plain includes the delta of the Tigris and Euphrates and is bounded roughly on the north by a line from Faluja to Khanaqin. It is flat, completely stoneless and for the most part, treeless; and the slope of the ground is so slight that there is a rise of only 100 feet between Basra and Baghdad—which are nearly 500 miles apart. The annual rainfall, most of which occurs between November and March, is only about 6 inches: temperatures are high during the day from May to October, but even in the hottest weather, in July and August, when the day temperature at Baghdad may rise to over 130°, there is a great drop during the night which alleviates the effects of the heat.

*Physical
Features and
Climate*

The Uplands are bounded on the north by a line from Faish Khabur to Khaniqin, and consist partly of gypsum desert, and partly of rolling downs with good soil which have about 20 inches of rainfall. Mosul is 700 feet above sea level ; Kirkuk is 1,087 feet, and temperatures in this region are somewhat less severe in the hot weather than on the Plain.

The Highlands which stretch along the northern and north-eastern frontiers consist of ranges rising to 14,000 feet and intersected by many beautiful and fertile valleys. Here the temperature is much less than on the Plain ; the mountains are covered by snow throughout the winter, and rainfall is abundant from November to May.

By means of irrigation, combined with the exiguous rainfall, summer and winter crops are grown in the plain ; and, round Basra, a great date palm area produces 75 per cent. of the world's supply of dates. Barley and rice are also grown, but the development of the considerable agricultural possibilities of this region, as also of the uplands, depends on the extension of irrigation works. At present the chief of these are the Hindiyeh Barrage, the Daghaira Barrage, the Beda Regulator and the Diala Weir, in addition to which there are primitive irrigation channels and also "lift irrigation" by means of pumps. On the uplands cereals are grown successfully where water is available, and irrigation by means of karez's, or underground tunnels, is practised. In the south of the highlands tobacco is grown : and in the north fruit. Wool from pastures in the uplands and cotton are also both being produced in increasing quantities.

Oil Resources The oil resources are fairly widespread, though the most important regions are round Mosul, Kirkuk and Khaniqin.

The principal field is in the neighbourhood of Kirkuk, and is part of the 35,000 sq. mile concession of the Iraq Petroleum Company. It is from this field that the double pipe line runs to Haditha, where it bifurcates to Tripoli *via* Palmyra and to Haifa *via* Mafraq.¹ The Kaniqin field, which is worked by a subsidiary company of the A.I.O.C., has a large refinery at Alwand, and is already producing enough oil for the local requirements of Iraq.

There are great asphalt deposits at Hit on the Euphrates.

¹It goes under the Tigris at Al-Fatha and the Euphrates at Haditha.

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The Tigris is the main line of communication in Iraq. *Communications :*
 Ocean going steamers can go as far as Basra, 70 miles up the *i. River*
 Shatt-el-Arab. Abadan which is halfway between Basra
 and the Persian Gulf and on Iranian soil is the port for the
 Anglo-Iran oilfields, and the tonnage of shipping using it is
 about three times as great as that which uses Basra. There is a
 regular service of steamers between Basra and Baghdad which
 carry passengers and freight and do the journey in three to
 seven days. Between Baghdad and Mosul flat-bottomed stern
 wheel steamers can be used during the months of high water,
 viz., in April and May.

The Euphrates is only navigable for shallow country vessels.
 This applies also to the Hai which connects the Tigris and
 Euphrates and which dries up in the late summer. The
 Karun can be used by vessels of shallow draft as far as Ahwaz.

There are few metalled roads owing to the scarcity of road *ii. Roads*
 metal, but it is possible to motor to most parts of the country,
 except after heavy falls of rain in December and January when
 the tracks become impassable. Baghdad is the centre from
 which most of these routes radiate and the following are the
 chief routes of entry into the country by land.

From Iran —Tehran, Hamadan, Kermanshah, Khaniqin, Baghdad.
 From Syria —Beirut, Damascus, Rutba, Baghdad
 From Palestine.—Haifa, Jerusalem, Amman, Rutba, Baghdad
 From Anatolia —Nisibin, Mosul, Baiji, Baghdad
 From Persian Gulf.—Basra, Baghdad, along the Tigris

Motor transport companies, of which the most important is
 the Nairn-Eastern Transport Company, provide rapid transit
 for passengers and baggage to the Mediterranean, doing the
 journey from Baghdad to Haifa or Beirut in two days.
 Rutba Wells, which is 263 miles from Damascus and 198
 miles from Baghdad is an important garrisoned post in the
 centre of the desert on these routes and also on the Imperial air
 route. It has rest house accommodation, a restaurant, post,
 telegraph and wireless facilities and an aerodrome.

The Imperial Air route to the East crosses Iraq and there *iii. Air Routes*
 are stopping places at Rutba, Baghdad and Basra.

Baghdad is also the railway centre and from it the following *iv. Railways*
 lines radiate

- (a) Southwards to Ma'gel, the port of Basra (metre gauge), with
 branches to Nasariyeh and Kerbala.

- (b) Northwards to Baiji (standard gauge). The section of this line from Samara to Baiji will be lifted when the rails are required for the extension of (c), mentioned below
- (c) Eastwards to Qaraghan, from which branches run to Khaniqin on the Iranian frontier and to Kirkuk (metre gauge). The latter will eventually be extended to Mosul.

It should be noticed that the so-called Constantinople-Baghdad railway has been completed as far as Nisibin, 200 miles north-west of Mosul. The gap in the railway communications of Anatolia and Iraq is now between Nisibin and Baiji or Nisibin and Kirkuk. A motor service between Kirkuk and Nisibin connects the Iraq railway system with the Taurus and Simplon-Orient Express (Baghdad to London 6 days).

Population The population of Iraq is about 3 millions, of whom about $2\frac{3}{4}$ millions are Arabs and Kurds, the remainder comprising Jews, Assyrians and Chaldaeans. The Arab population outside the towns is almost entirely tribal in organization under its own chiefs or "shaikhs." It falls into four main groups:— (a) the Bedouin tribes who are nomadic pastors of camels, sheep and horses; (b) the cultivator tribes or fellahin near the rivers; (c) Semi-pastoral tribes which live near the rivers in the hot weather, but move into the desert in the winter; (d) the marsh Arabs whose habitat is in the marshes of the lower Tigris and Euphrates. All of these are Mohammedans, Sunnis being strongest numerically north of Baghdad and Shiah south of Baghdad. The majority of the Jews who number about 73,000 live in Baghdad. The Assyrians and Chaldaeans who number less than 100,000 are Christian and live mostly in the Highlands.

The Defence of Iraq Iraq marches with the Arab Kingdom of Saudi Arabia on the south-west, with Transjordan and Syria on the west; with Turkey on the north; with Iran on the east and with Kuwait on the south. Of these frontiers the only two which have given any serious cause for anxiety are the Turkish and Arabian frontiers.

¹ *The Mosul Frontier* The northern frontier runs chiefly through a mountainous region and is strengthened by the lack of communications from Anatolia towards it. Thus, no road fit for continuous heavy motor traffic runs towards Iraq from Diarbekr, the nearest important Turkish military centre, and all routes

are practically out of action from November until March. The Turkish railway terminates at Nisibin, 50 miles west of the boundary and the shortest route from Nisibin to Mosul passes through the French Mandate of Syria. Further, the Turkish railway crosses Syria for 190 miles in the neighbourhood of Aleppo. Turkey is therefore badly placed as regards communications which might be used in an attack on Iraq, and in any case, if she made such an attack, would probably find herself involved in operations on the coast of Anatolia or in the neighbourhood of the Straits. Correct relations have existed on the Mosul frontier since 1925, and the Turkish chagrin at the loss of the oil resources of her Mosul vilayet has been largely mitigated by financial arrangements which give her some compensation.

On the south-west frontier numerous incidents have occurred owing to serious raids made on Iraqi territory by Arab tribes which were nominally subjects of Ibn Sa'ud. The Mohammedan and Bahra agreements of 1922 and 1925 respectively attempted to establish a boundary which would, as far as possible, avoid the almost inevitable clashes which arise from the seasonal movement of Bedouin tribes in search of water holes and wells, and, in a region of special difficulty, established a neutral zone for this purpose. But these agreements failed in this aim and, accordingly, the Iraq Government constructed police posts at some of the more important areas well within Iraqi territory. British influence was, however, eventually successful in producing a better understanding between the two countries, which was endorsed by a Treaty of Alliance, signed in 1935, for ten years. But this frontier must remain a cause of anxiety because religious as well as economic causes are involved. The Wahabite tribes of Arabia regard an attack on Iraq as something in the nature of a crusade against heretical sections of Islam.

Though much has been accomplished since 1922 in the way of producing stable conditions in Iraq, it is too early to say that stability and internal security have been attained. Many Arab tribes would doubtless like to revert to the good old lawless days; the Shiah majority views the Sunni King with suspicion; minorities such as the Assyrians and some of the Kurds are distrustful of the will of the Iraq Government to

ii. *The
Arabian
Frontier*

iii. *Internal
Security*

give them a fair deal, since the British military forces (other than the R.A.F.) have left.¹ The incident in 1932, which necessitated the dispatch of the 1st Battalion of the Northamptonshire Regiment by air from Moascar to replace the two battalions of Assyrian levies who had "handed in their notice" as a protest against the intention of Great Britain to withdraw from Iraq, illustrated the attitude of the Assyrians who felt that their security depended on the presence of sufficient British forces.

The Defence Forces

The British forces in Iraq are under the Air Officer Commanding Iraq Command whose Headquarters are at Hinaidi outside Baghdad. They consist of Bomber Squadrons at Dhibban, Hinaidi and Shaibah respectively, one Bomber Transport Squadron at Hinaidi and a Flying Boat Squadron at Basra, together with one section of armoured cars at Mosul, two sections at Hinaidi and one at Basra.

The Iraq Government Forces which are now responsible for the maintenance of order consist of :—

- (a) The Iraq Army.—3 Cavalry Regiments, 5 Mountain Batteries, 5 Field Batteries, 21 Battalions, 1 Motor Machine Gun Company (2 squadrons).

Total strength 20,000. Armed and equipped on the scale of the Indian Army.

In January 1934 compulsory military service in principle was introduced, but its effects on numbers are small as exemptions are granted on many grounds.

- (b) The Iraq Police.—1 Mounted Regiment and 1 Dismounted Company, 1 Motor Unit (armed with Vickers and Lewis guns), the Camel Corps. Total strength 9,000.

- (c) The Royal Iraqi Air Force (2 squadrons).

Officers of the Iraq Army are allotted vacancies at the British Senior Officers Schools and Staff Colleges.

The distribution of these various forces is, of course, determined by the necessities of the time. It is desirable to notice, however, that the concentration at Mosul and Baghdad

¹ They would appear to have good reason for this, since it was the massacre of the Assyrians by General Bekir Sidky (himself recently assassinated) which made him a national hero.

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is well placed for any trouble in the north and north-east. Near the Arabian frontier there are the Motor Unit and Camel Corps of the Iraq Police, backed by the Bomber Squadron at Shaibah. For the defence of Imperial interests and the air route in the Persian Gulf there is the Flying Boat Squadron at Basra.

In June 1930, Great Britain signed a "Treaty of Alliance and Amity" with Iraq. The preamble to this treaty stated that, as the British Government was prepared to support the candidature of Iraq for admission to the League of Nations in 1932, and as the mandatory responsibilities of Great Britain would cease on the admission of Iraq to the League, the two parties "had agreed to conclude a new treaty on terms of complete freedom, equality and independence," which would become operative upon the entry of Iraq into the League. This Treaty should remain in force for 25 years from the date of Iraq's admission to the League.

*The future of
Iraq*

Its chief terms are as follows :—

- (a) Perpetual peace and friendship and close alliance between Great Britain and Iraq and full and frank consultation on all matters of foreign policy affecting their common interests.

(b) *Article 3.*

"Should any dispute between Iraq and a third State produce a situation which involves the risk of a rupture with that State, the High Contracting Parties will concert together with a view to the settlement of the said dispute by peaceful means in accordance with the provisions of the Covenant of the League of Nations and of any other international obligations which may be applicable to the case."

Article 4

"Should, notwithstanding the provisions of Article 3 above, either of the High Contracting Parties become engaged in war, the other High Contracting Party will, subject always to the provisions of Article 9 below, immediately come to his aid in the capacity of an ally. In the event of an imminent menace of war the High Contracting Parties will immediately concert together the necessary measures of defence. The aid of His Majesty the King of Iraq in the event of war or the imminent menace of war will consist in furnishing to His Britannic Majesty on Iraq territory all facilities and assistance in his power, including the use of railways, rivers, ports, aerodromes and means of communication."

Article 5.

"It is understood between the High Contracting Parties that responsibility for the maintenance of internal order in Iraq and, subject to the provisions of Article 4 above, for the defence of Iraq from external aggression rests with His Majesty the King of Iraq. Nevertheless, His Majesty the King of Iraq recognizes

that the permanent maintenance and protection in all circumstances of the essential communications of His Britannic Majesty is in the common interest of the High Contracting Parties. For this purpose and in order to facilitate the discharge of the obligations of His Britannic Majesty under Article 4 above, His Majesty the King of Iraq undertakes to grant to His Britannic Majesty for the duration of the alliance sites for air bases to be selected by His Britannic Majesty at or in the vicinity of Basra and for an air base to be selected by His Britannic Majesty to the west of the Euphrates. His Majesty the King of Iraq further authorizes His Britannic Majesty to maintain forces upon Iraq territory at the above localities in accordance with the provisions of the annexure of this treaty on the understanding that the presence of those forces shall not constitute in any manner an occupation and will in no way prejudice the sovereign rights of Iraq."

Article 6.

"The annexure hereto shall be regarded as an integral part of the present treaty"

Article 11

"The present treaty shall remain in force for a period of twenty-five years from the date of its coming into force. . . ."

- (c) The substance of the Annexure referred to in Articles 5 and 6 is as follows —Great Britain shall maintain forces at Hinaidi for 5 years, in order to enable Iraq to organize the necessary forces to replace them. Great Britain shall also be permitted to maintain forces at Mosul for 5 years. Iraq undertakes to provide at the request and expense of Great Britain guards for British air bases. Great Britain shall have all possible facilities for the movement of British forces in transit across Iraq, and for the storage and transport of all supplies and equipment required by them.

Great Britain will provide at the cost of the Iraq Government, (a) Naval, military and air instruction of Iraqi officers in Great Britain, (b) Arms, ammunition, equipment, ships and aeroplanes of the latest available pattern for Iraq, (c) British naval, military and air force officers to service in an advisory capacity with the Iraq forces.

This Treaty was subsequently considered by the Permanent Mandates Commission and the Council of the League of Nations and was approved subject to the following guarantees: (1) The protection of minorities; (2) the safeguarding of the interests of foreigners in the judicial sphere; (3) freedom of conscience and the safeguarding of the activities of religious missions; (4) the security of rights acquired and financial obligations incurred by the Mandatory; (5) respect for international conventions; (6) concession to members of the League of most favoured nation treatment, subject to reciprocity; (7) differences of opinion with regard to the interpretation or execution of the undertakings assumed by Iraq may be put before the Permanent Court of International Justice.

The government of Iraq agreed to these guarantees and, in October 1932, Iraq was formally admitted to the League and

PALESTINE, IRAQ, ARABIA AND PERSIAN GULF 337

the British Mandate came to an end. By the terms of the Treaty Mosul has ceased to be an air base and Hinaidi also will shortly be evacuated. A new air base at Dhibban on the west bank of the Euphrates has been completed and is now occupied. Dhibban is on our air route, is much further than Hinaidi from the capital, and has the Euphrates as a possible line of defence.

British interests are, indeed, too closely involved for Britain to take the risk of leaving the country to fend for itself. The security of the oilfields in south-west Persia and of the pipeline to Abadan is dependent on Southern Iraq through which run the chief lines of approach to the oil area. British financial interests are largely concerned in the oilfields of the Iraq Petroleum Company to the east of the Tigris and those of the British Oil Development Company on the west bank. The oil pipe line to Haifa with its 12 pumping stations and subsidiary organization is an important Imperial responsibility. Further, our Imperial air routes to India and Australia pass over Iraq; and finally, British naval security in the Indian Ocean depends on our control of the head of the Persian Gulf, or at least on its being in the hands of a friendly and stable power.

*The Imperial
importance of
Iraq*

ARABIA

The great peninsula of Arabia, 1,000,000 square miles in area, flanks for 1,600 miles the Imperial route through the Red Sea, and for 700 miles our sea and air routes through the Persian Gulf. On its western and northern limits it touches the territories of Transjordan and Iraq in which British interests are paramount. The Aden Protectorate, Oman and Kuwait lie at its southern, eastern and northern corners and are all important British responsibilities. In it are situated Mecca and Medina, the chief Holy Places of the Mohammedan faith which is professed by about one-fifth of the inhabitants of the British Empire. On all these counts, the maintenance of stable and orderly conditions within the peninsula and of friendly relations between the Arab communities of Arabia and of the neighbouring countries is definitely in the British interest.

The peninsula is a quadrilateral-shaped plateau, tilted

*Physical
features*

so that, in general, its higher side is the range of mountains which runs close and parallel to the Red Sea. It consists of (1) a coastal plain ; (2) the desert and steppe lands of the interior ; (3) a central core which rises about 400 feet above the central plateau and contains important groups of oases.

Its present Political divisions are :—

(1) Saudi Arabia consisting of

- (a) The Kingdom of Nejd (capital, Riyadh) and El Hasa holds a dominant position among the Arabian principalities, and its ruler, Abdul Aziz ibn Sa'ud is the outstanding figure in the Arabian world. Nejd, his home, is the centre of the Wahābi sect of Islam which originated in the latter half of the eighteenth century out of the crusade of a Mohammedan revivalist, Mohammed ibn Abd-al-Wahab and which aims at purifying Mohammedanism of idolatrous accretions such as the worship of material emblems. The Wahābis "are puritans and to a certain extent ascetics : they abhor the cult of the dead, and consequently visits paid to the graves of saints, which form a prominent part of Moslem practice in most countries ; they reject the authority of the founders of the four orthodox sects . . . ; they adhere to the literal interpretation of the Koran . . . ; they disapprove of the use for personal adornment of silk, jewels, gold and silver, and they taboo tobacco."¹ After initial successes against both the Turks and other Arabian communities in the opening years of the nineteenth century the Wahābis suffered severe reverses, and it was not until the beginning of the twentieth century that they regained importance with the advent of Ibn Sa'ud. In 1913 he captured El Hasa from the Turks ; during the war he assisted the Allies ; in 1921 he captured Hail, the capital of Jebel Shammar ; between 1924 and 1926 he conquered the Hejaz ; by 1930 he had acquired Asir ; in 1934, he defeated the Imam of Yemen. By the Treaty of Seddah (1927), Great Britain acknowledged him as ruler of Nejd and the Hejaz and as an independent ruler. His relations with the British Government are friendly, and recent treaties between him and Iraq, Transjordan and

¹ *Mohammedanism*, by D. S. Margoliouth, Home Univ Lib.

Egypt have removed causes of friction with these countries.

He has a small regular army of about 1,000 men, and depends mainly on tribal levies for such forces as he requires from time to time.

As the dominant figure in the Arab world and the ruler of 3 millions in Nejd, and 1 million in the Hejaz, out of a total population of 7 millions in the Arabian peninsula, he is the only ruler likely to fill the part of leader in any Arab federation.

- (b) The Kingdom of the Hejaz, which contains the two holy cities of Mecca and Medina and the two pilgrim ports, Jeddah the port for Mecca and Yanbo for Medina, is chiefly an unproductive desert region with a few scattered oases, dependent on the pilgrim traffic for its economic existence. When this traffic diminishes, as during the last few years, disorders are likely to occur, and recently Ibn Sa'ud has had to deal with a serious outbreak in the Hejaz. As a Wahābi Mohammedan his creed teaches him to discourage or barely to tolerate the trappings of the Sunni worship in Mecca and Medina. He is, thus, always liable to be in opposition to powerful religious vested interests in those cities, and therefore to be confronted with serious internal security problems from time to time.
- (c) Asir (population 1,500,000) capital, Sabiya, is nominally under the rule of the Shaikh Idrissi of Sabiya; actually since 1930 it has been part of Ibn Sa'ud's territory.
- (2) The Yemen (population two to three millions), capital, Sana'a, is the most populous and cultivated part of Arabia. The Imam Yahya of Sana'a, who remained loyal to the Turks during the war, is the most influential ruler in this region and is the spiritual head of the Zaidi section of Islam, a section whose beliefs are similar to those of the Shiahs and which is strongly opposed to Wahābi ideas. After the war the Imam claimed and occupied the south-west part of the Aden Protectorate, and in 1927 his forces had reached a point only 40 miles from Aden. Air operations were carried out against him by the R.A.F. garrison in Aden during 1928, in

conjunction with ground attack by the tribes under British control with the result that the Imam withdrew his forces across the border into the Yemen. In 1934, he sustained a severe defeat from the troops of Ibn Sa'ud, and, as a result, lost some territory and suffered greatly in prestige. Early in the same year frontier difficulties had been adjusted with Aden, and a Treaty of Friendship was concluded between Yemen and Great Britain for 40 years.

- (3) Aden, which consists of the peninsula and isthmus of Aden proper, Shaikh Othmán with the surrounding district and the Little Aden peninsula, together with the treaty tribes of the Aden Protectorate, which includes the Hadramaut. The Colony and Protectorate are now under the Colonial Office.
- (4) Oman (500,000) is the most important and potentially wealthy part of the peninsula after Yemen. The rule of the Sultan of Muscat, though he claims overlordship over the whole of Oman, extends in fact only over the coastal region round Muscat itself. As far as effective government can be said to exist, Oman is a British Protectorate. Muscat is a British port of call, where the Indian Government maintains a postal and telegraph office. Close relations have existed for years between it and the Government of India; there is a British Political Agent and the trade of this portion of the Arabian coast is mainly in the hands of Indian traders. It should be noticed that Gwadar on the coast of Baluchistan, which is on the Imperial Air route to India, belongs to Muscat.
- (5) The Bahrain Islands, 20 miles off the coast of Arabia, noted for their pearl fisheries, rice, coffee and sugar, are in treaty relations with the Indian Government. The base of the British squadron in the Persian Gulf is now situated in this group, and there is also an airport on the route to India.
- (6) Trucial Oman, formerly known as the Pirate Coast, is the southern part of the Persian Gulf coast between Oman and El Hasa. Originally it was notorious as the home of pirates and slave traders; and early in the nineteenth century, when Great Britain began to police the Gulf, there

PALESTINE, IRAQ, ARABIA AND PERSIAN GULF 341

were frequent naval encounters. Between 1835-56 many treaties were made with the Arab chiefs of the locality to secure peace, regulate or abolish slave traffic and bring piracy to an end. The result was a union of the principal Arab tribes of the region, called the Trucial League. The chiefs of these tribes, known as the Trucial Chiefs, deal with the British Political Resident in the Persian Gulf, and the whole region can be regarded as a sort of British semi-Protectorate, in which the British Government, by treaty engagements, controls the foreign relationships of the Trucial Shaikhs.

- (7) Qatar, a sheikhdom on the peninsula between Trucial Oman and El Hasa, has been in alliance with Great Britain since 1882.
- (8) The Sultanate of Kuwait at the north-west corner of the Persian Gulf has a British Political Agent, and is in treaty relations with the Indian Government. It is chiefly important because it possesses the best natural harbour on the Persian Gulf, a stretch of 20 to 30 square miles of deep water almost completely landlocked. Kuwait is an important airport on the route to India.

PERSIA (IRAN) AND THE PERSIAN GULF.

Three powers at various times in the nineteenth and early part of the twentieth centuries have struggled for supremacy in Iran. Germany, in order to forward her "Drang nach Oesten" policy towards India; Russia, which varied between the policy of constructing a railway through Iran to the warmer seas or through Afghanistan to reach India; and Great Britain, which was and still is profoundly interested in the whole region as a buffer between Russia and the Indian Ocean.

Another reason for Great Britain's interest in Iran was the scanty supply of oil in the British Empire, and the possibility of obtaining it from that country. Accordingly, in 1914 the British Government purchased control in the Anglo-Iran Oil Company, and increased its holding further in 1917, the object being to make certain of sufficient oil at least for the requirements of the navy. The original Oil Concession granted for sixty years by the Iranian Government

*Foreign
Rivalries in
Iran before
the War*

in 1901 covered nearly three-quarters of the whole area of Iran, and with it went guarantees of police protection by the Iranian Government. Only a portion of the original concession has been prospected or worked up to the present. The main field is at Masjid-i-Sulaiman, whence a pipe line runs along the Karun valley to Kut Abdulla, where another line from the Haft Khel Oilfield joins it; it then proceeds along the east bank of the river to Abadan, where the tank farms and refinery are situated.

*Reza Shah
Pahlevi*

The rapid rise to power of Reza Khan in 1921, first as Prime Minister and Commander-in-Chief, and later as Dictator and Shah of Persia in 1925, was followed by measures which aimed at the removal of all outside influence and the reorganization of the country on a firmer footing. For this purpose an efficient national army was created by conscription; the semi-independent tribes who kept certain areas in a state of anarchy were brought to heel, and a progressive policy of railway and road construction was to be pursued.

*The Trans-
Iranian
Railway*

In accordance with this policy, a Trans-Iranian railway was begun. When completed, it will run from Bandar Gaz (Bandar Shah) on the Caspian through Ahabad, Teheran, Qum, Dizful and Ahwaz to Bander Shahpur on the Persian Gulf.

This ambitious programme is designed to tap the regions round the Caspian and to give a line of communication which would be less susceptible to British control than would be a line from east to west joining the Indian and Iraq railway systems. Its defects are obvious. The cost of bridging and tunnelling are very great; the traffic at first will be insufficient to pay interest on the capital; and, from a strategic point of view it will provide a possible route for Russian penetration. An east to west line, on the other hand would have been of greater value to Great Britain and would have formed part of the line which must eventually join India to the Levant.

*British
interests*

British and Iranian interests are, however, in the main, closely interlocked. Financially, Iran receives a considerable part of its revenue in the form of royalties from the Anglo-Iran Oil Company and a large part of the export trade of Iran is carried in British ships to British markets. But in several respects the interests of the two countries conflict.

PALESTINE, IRAQ, ARABIA AND PERSIAN GULF 343

The Iranian Government has refused to continue the arrangement by which Imperial Airways used the aerodromes on the Iranian coastline at Bushire and Bander Abbas, demanding that a route through central Iran should be followed. This demand was based on the contention that the route along the coast did not benefit Iran and was liable to intensify British interests and British control along the Iranian coast. The result was that Imperial Airways had to establish the route along the southern coast of the Persian Gulf which is shown on Map 24.

Further, Iran, at the present time, lays claim to the Bahrain Islands, on the ground that they were Iranian territory up to the year 1782 ; and has submitted her claim, with regard to this British Protectorate, to the League of Nations. The harbour of Basidu, at the western end of the Persian island of Kishm, was another bone of contention. This harbour had been used by British naval vessels for over a hundred years and a fuel depot was placed there. The base of British ships in the Persian Gulf has now been transferred to Bahrain. Moreover, difficulties with the Persian government, regarding the Nushki-Duzdap line have led to the closing down of the small section of this line which lies in Iran, and it now terminates at Nokkundi on the frontier of Baluchistan. The most serious cause of dispute, however—the cancellation by Persia of the A.I.O.C. concession—has been settled by a new agreement lasting until 1993 which gives substantially better terms to Iran.

British responsibilities in the Persian Gulf are normally those of policing the Gulf ; protecting British interests there including our oil supply and the ground organization of our air route ; enforcing generally the Trucial Treaties and suppressing the arms traffic and slave trade. For this purpose a small squadron patrols the Gulf.

British responsibilities in the Persian Gulf

SUMMARY OF BRITISH POSITION IN THE MIDDLE EAST

The British position in the Middle East, so important because of oil and communications, shows to-day elements of both strength and weakness. A Treaty with Iraq gives us that country as an ally and enables us to keep a small air garrison there until 1957. Palestine is a British mandate and

occupied by a British force ; Transjordan has its local force under British control. Thus in normal times at least the safety of our air route and oil interests is safeguarded. Saudi Arabia is in treaty alliance with Great Britain, and our differences with Yemen have been composed in a treaty of friendship which removes the danger of land attack on Aden. Saudi Arabia has also settled its differences with Egypt, Transjordan and Iraq in treaties, thus strengthening the whole structure of British alliances and interests in that region.

On the other hand, the occupation of Abyssinia by Italy and the maintenance there of large Italian military and air forces, closely flanking the Red Sea, have added a new element to the situation. Italy has cultivated interests in Yemen which might strengthen her position there. Moreover, the Palestine problem with its possibilities of estranging Mohammedan loyalty from us must obviously require careful handling if it is not to have a weakening effect on the British position throughout the whole Middle East.

Obviously, recent events in the Mediterranean-Red Sea area have enhanced the importance of the Iraq-Transjordan-Palestine corridor as a means of air communication from the Indian Ocean to the eastern Mediterranean unflanked by any Great Power ; and the security of Haifa as an oil fuelling port, of the pipe-line from the Iraq oilfields and of the oilfields themselves, is of greater importance than ever.

CHAPTER XIX

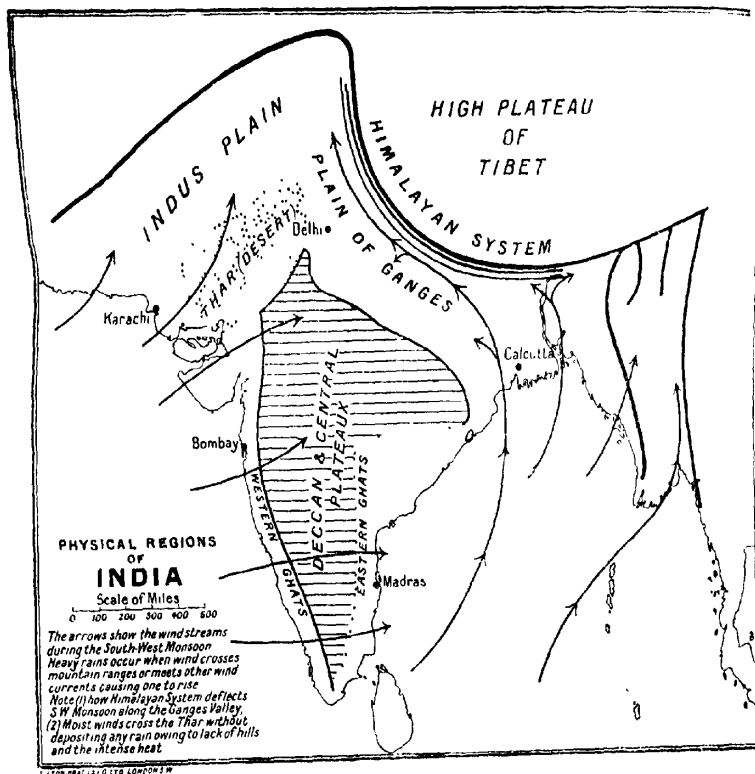
INDIA AND BURMA

INDIA extends from the latitude of Southern Nigeria to the *Size* latitude of Southern Spain. Its area of 1,800,000 square miles is the same as that of Europe excluding Russia. From Bombay to Calcutta (1,200 miles) is farther than from London to Belgrade or Riga ; from Madras to Bombay (650 miles) is farther than from London to Berlin, and from Delhi to Madras (1,070 miles) is farther than from London to Rome. Facts, such as these illustrate the continental size of its territory.

It is separated from Asia, of which like Europe it is a peninsula, by the immense barrier of the Himalayas, a mountain wall, 1,500 miles in length and over 100 miles in width, whose main range averages 20,000 feet. To the south of this barrier lies the Indo-Gangetic Plain, the land of the two great rivers, the Indus, which rises to the north of the Himalayas, cuts its way through and flows to the Arabian Sea, and the Ganges whose source is on the southern slopes in the Punjab and whose outlet is on the Bay of Bengal. The Brahmaputra, rising in Tibet, cuts through the Himalayas and flows south to join the Ganges in a great combined delta. This plain of the Indus and Ganges, watered by these rivers and provided with alluvium washed down from the Himalayas, is the most fertile and densely populated part of India, and supports over forty per cent. of its total population. South of the Indo-Gangetic Plain is the Peninsular Plateau, which beyond the Narbada is called the Deccan, and which averages about 2,000 feet above sea level. At the western edge of this plateau (the Western Ghats), the ground drops rapidly to a narrow coastal plain. On the eastern edge (the Eastern Ghats) the slope is more gradual because the plateau is tilted so that its highest points are near the western edge. This general slope downwards from west to east explains the fact that most of the rivers of the Peninsular Plateau, such as the Mahanadi, Godavari, Kistna, Pinner and Cauvery flow to the Bay of Bengal.

*General
Features*

Only two great streams, the Nerbada and Tapi take a westward course, cutting their way through lines of fracture in the plateau between lofty cliffs, and across the narrow coastal plain to the Arabian Sea. In the south-western part of the plateau, high hills such as the Nilgiris, over 8,000 feet in height, rise above the rolling plateau country whose general charac-



MAP 25

teristics are wide stretches of undulating ground broken at times by strange volcanic-looking hillocks.

Resources
(a) Agricultural

India is mainly an agricultural country. Almost nine-tenths of its people live by agriculture, and all other occupations are as yet of secondary importance. The agricultural products can be conveniently considered with reference to the natural regions already described.

- (1) The foothills of the Himalayan system. A region of heavy rainfall and comparatively sparse population. Tea in Assam and the Darjeeling district, rice in the well-watered valleys, maize and wheat on the dryer slopes of hills are the most important crops, while on the higher slopes potatoes and fruit are cultivated with success.
- (2) The Peninsular Plateau. In the north-west there is a vast region of disintegrated volcanic rock known as black cotton soil which produces 60 per cent. of the output of Indian cotton. It is generally grown, however, under primitive conditions and is of poor quality. The "staple" (length of fibre) is too short for the Lancashire spinning mills, and the export trade is therefore chiefly to Germany and Japan which deal in the cheaper qualities of cotton goods. The better seed and improved methods of cultivation which are now being introduced in selected areas will, it is expected, succeed in making India more important as a source of good quality cotton.

The remainder of the Deccan produces stock, barley, maize, rice, millet and wheat, and, on the western coastal plains beneath the Ghats, sugar is being grown in increasing quantities.

- (3) The Indo-Gangetic plain is the most fertile agricultural part of India and produces jute and rice in Bengal, wheat, millet, barley, cotton and sugar cane in the United Provinces and eastern Punjab; wheat, millet and maize in the western Punjab and stock in the plains of the north-west. It is also a region in which lie great cities like Calcutta the port for the Ganges-Brahmaputra region, Allahabad a trading centre at the junction of the Jumna and the Ganges, Lucknow on the river Gumti, Cawnpore on the Ganges, and Lahore beside the Ravi, one of the tributaries of the Indus.

Coal to the amount of over 20 million tons a year, but of (b) *Mineral* rather indifferent quality, is mined chiefly in western Bengal, Bihar and Orissa and the Central Provinces. For shipping and manufacturing purposes imported Natal coal is largely used. Iron ore is found and worked in Orissa, Central Provinces and Bengal. The manganese of Madras, Central India and Central Provinces is one of the leading mineral exports, as is also mica from Northern Bengal. The oilfields of Burma,

Assam and the Punjab maintain a steady supply of petroleum.

(c) *Industrial* Bombay and the Central Provinces are now centres of many cotton factories which produce a coarse and cheap variety of cotton at a low price. Flourishing iron and steel industries, like the Tata works at Jamshedpur, are developing the iron ore resources of the country; and jute mills in the neighbourhood of Calcutta have reduced the imports of manufactured jute.

India receives most of her imports from Great Britain, and Great Britain is likewise her best customer, with Japan and the United States respectively second and third.

*India as a
base of
supply*

Before and during the war, important technical and manufacturing establishments were developed, under the direction of the Master General of Ordnance, to meet the needs of the Army in time of peace and to be capable of expansion to meet war demands. In addition to these military establishments, the great expansion of the Tata Steel and Iron Works, of railway and locomotive works belonging to the various railways, of the cotton mills of Bombay, of woollen mills at Cawnpore, of jute mills at Calcutta, and of the coal, petroleum and other mineral resources of the country is gradually making India less dependent on Great Britain for necessary military supplies in time of war. All the finer technical equipment, all motor transport and aircraft with their accessories, most of the explosives used, a large part of the woollens and textiles, and several of the necessities of life for white troops and the white civil population must still, however, be imported. Technical skill is not widespread nor is it of a high order.

As a base of supply of agricultural commodities India is, however, increasing in importance. The development of irrigation by means of the Sukkur Barrage on the Indus (when all its subsidiary canals are completed), is opening for cultivation an area in Sind larger than the whole cultivated area of Egypt; similarly the Lloyd Dam south of Poona has opened a large region for production.

*Lines of
communication
in
India
(a) Rail*

The total length of railways (mainly government owned or controlled) is about 43,000 miles of which about half is of Indian standard gauge (5 ft. 6 ins.), 17,500 miles are metre gauge and the remainder is of 2 ft. 6 ins. or 2 ft. The advantages of the 5 ft. 6 ins. gauge are manifest to any traveller in India,

particularly after he has changed from a long and tiring journey on a metre gauge. Smoothness of movement, comfortable carriages and more air space are essentials of long-distance travel in a hot climate. The disadvantage, particularly from a military point of view, is the impossibility of utilizing in case of need rolling stock from Great Britain or nearer countries like Egypt or Australia on Indian lines. Spain indeed, is the only country from which rolling stock of this particular gauge could be obtained at short notice.

The railway system suffers from certain strategic defects, inevitable in a country which is so extensive and so handicapped by lack of capital for development. The most important of these are the frequent changes of gauge, from the 5 ft. 6 in. Indian standard gauge to the metre or narrower gauges, which hamper the easy passage of trade and which in war or disorder would absorb personnel for unloading, loading and supervision at stations where gauge is broken, such as Khandwa, Poona, Hyderabad (Sind), etc. There is also a scarcity of bridges across the large rivers and a consequent enhanced importance of those which exist. Perhaps the most serious illustration of this is the Indus which is crossed in its whole course by only five railway bridges, at Kotri, Rohri, Kalabagh, Khusalgarh and Attock, respectively. The strategic importance of these few connecting links between India and the North-West Frontier needs no comment. There is also a lack of lateral railway communication along the frontier region, west of the Indus, which may, in time, be overcome by extending the line which now reaches Fort Sandeman. And finally there is no line joining India and Burma.

There are some 60,000 miles of metalled roads in India, (b) *Roads* in addition to several hundred thousand miles of unmetalled roads and tracks, all of which are under the control of a public works department in each province, and the variation in quality in the different Provinces is very marked. The roads joining the large military stations are, however, on the whole in good repair considering the climate and the money available, and are a necessary and useful adjunct to rail communications. The three grand trunk roads of India are of great historical and military importance, viz. (1) The road from Madras, through Bangalore, Belgaum, Poona, Kalyan (near Bombay),

Mhow, Indore, Gwalior and Agra to Delhi. (2) The road from Calcutta *via* Benares, Allahabad and Cawnpore to Delhi and thence to Ambala, Lahore, Rawalpindi and Peshawar. (3) The trunk road from Madras to Calcutta. Most of the important cantonments of India outside the North West Frontier lie on one or other of these trunk roads. It is desirable to add that the advent of the motor is having a most beneficial effect on the building and maintenance of roads.¹

- (c) *Sea-ports* The total tonnage of the vessels which enter and clear at ports in India annually is about 20 million tons, and the total value of the trade carried by sea amounts to over £300 millions. The most important seaports are Bombay, Karachi, Calcutta, Madras, Chittagong and Vizagapatam. Bombay, in spite of the growth of Karachi, still remains much the more important of the two great harbours of the west. Karachi, however, has four advantages. It is the natural port for the North-West Frontier; it is less affected by the south-west monsoon; its climate is less severe than Bombay, and it lies at the air gateway by the Indo-Gangetic plain to Delhi and Calcutta.² Calcutta, 120 miles up the Hooghli river, though farther than Bombay from England, is still the most important trading port in India because it is the export centre for Bengal trade. Madras, like all coastal towns on the eastern side of the peninsula, has no natural harbour, is dangerous during part of the north-east monsoon, but is situated at the eastern end of the important Palghat pass through the Deccan to Calicut, and is a convenient port for communication with Burma. Chittagong, the port for the export of rice, tea, oil and hides from Assam, is becoming of great importance. Vizagapatam is being developed, and should be the outlet of a large area of fertile country, a half-way station between Colombo and Calcutta, and a port on the route from Europe to Rangoon.³

- (d) *Air routes* As described in a previous chapter, the air route to Australia

¹ A weakness is the narrowness of the metalling (12 feet). Passing cars have to go on to the unmetalled surface. The result is dust in the dry weather, morass in wet

² In spite of its extensive lay out and equipment it is still mainly a military port

³ Expectations that Vizagapatam would prove a great success as a commercial port have turned out, so far to be fallacious. It is, however, being considered as a possible base for the Royal Indian Navy, for which its strategic position would seem to render it highly suitable.

crosses India, where it is maintained by Indian Trans-Continental Airways. There are also several local services, such as regular services from Bombay to Karachi and Madras, and from Karachi to Lahore.

The population of India (1931) was 352,988,000, or nearly *The Population* one-fifth of the total population of the world. Bengal with over 50 millions, the United Provinces with 48 millions and Madras with about 47 millions all exceed Great Britain in population. Behar and Orissa comes next with $37\frac{1}{2}$ millions : the Punjab has $23\frac{1}{2}$ millions ; Bombay has 22 millions, Central Provinces and Berar, $15\frac{1}{2}$ millions ; Burma, $14\frac{1}{2}$ millions ; Assam, $8\frac{1}{2}$ millions, and the North-West Frontier Province, $2\frac{1}{2}$ millions. In addition to these there are the Indian States whose total population amounts to over 81 millions.

In this immense population there are at least 20 races which *Races and Languages* are as distinct from one another in appearance and characteristics as are the various races of Europe.

There are some 222 different vernaculars in use, the language with the widest currency being Hindustani in its two forms and scripts, "Urdu" and Hindi. Urdu, the language of the camp and court of the Mogul conquerors, is Hindi with many Persian, Turki and English words included. But it is far from being generally understood all over India. "For example in the Madras Presidency, the prevailing vernaculars belong to a totally different family of speech, the Dravidian family, represented principally by Telugu—which is also spoken in Hyderabad State—Tamil, Kanarese (which is also the main language of Mysore) and Malayalam. Bengali is the natural tongue of nearly 50 millions of people in Bengal, Western Assam, Behar and Orissa. Marathi is spoken in parts of Bombay, the Central Provinces, Berar and Hyderabad ; Punjabi in the Punjab and Kashmir ; Gujarathi in Gujarat and Baroda ; Rajasthani in Rajputana and Central India ; Sindhi in Sind ; and so on. Burma and the Assam hills, again, use tongues of an entirely distinct linguistic family . . . it is enough to say that a man who wished to make himself generally understood in all parts of India (without including special areas or remote tribes) would have to be master of as many separate tongues as a linguist who was prepared to

accomplish the same achievement throughout Europe.”¹ In order to provide a lingua franca for the Indian Army, in which orders, military manuals, etc., can be issued, Urdu, written in Roman script, is now used, and taught to those men (about 40 per cent.) to whom it is a completely unfamiliar language.

Religions

Religions are as varied as languages, but the most important are : Hindus, 68 per cent. of the population ; Moslems, 21 per cent. ; Buddhists, 3·6 per cent. (mainly in Burma). There are also about 6 million Christians, 4 million Sikhs, and 1 million Jains. Of these, Mohammedanism and Christianity are increasing more rapidly than Hinduism. There are also 43 millions of “untouchables,” the depressed classes who, while Hindus, are outside the social and religious pale of Hinduism and are not included in the above figures. The future of this section which is becoming politically articulate is one of the most interesting problems of India. It is from these depressed classes that most of the converts to Christianity and Islam are derived.

*Other
Character-
istics*

The population is predominantly agricultural ; over 80 per cent. of it lives in villages, is rooted to the soil, seldom moves more than a few miles from home, and is extremely conservative in methods of agriculture, modes of life and rules of hygiene and sanitation. Diseases, such as malaria, and epidemics of plague and cholera are able to take an enormous toll annually, and the average longevity of the Indian is only about 25 years, as against double that period for the inhabitants of these islands. When 15 years are taken away from this average life for childhood, the average manhood period is thus only 10 years in India as compared with 35 in Great Britain.

Further, widespread illiteracy exists, and only 8 per cent. of the total population can be classified as literate. This not merely increases the difficulty of introducing a general public opinion on matters of health and sanitation, new modes of agriculture, sound economic principles, etc., but it also seriously limits the proportion of the population which is available for technical development. The education which exists tends to be regarded by the Indian as a means to

¹ Simon Commission Report, Vol. I.

obtain Government employment, rather than as an essential for the economic development of the country.

Not merely are there in India many races, languages and religions, but there is also a distinction, which finds its roots in antiquity, between the classes of the community who are regarded as martial and those who are not. Enlistment into the Indian Army is consequently restricted at present to a much smaller population than that of India as a whole, as may be seen from the following table which shows the races from which recruiting chiefly takes place.

<i>Name.</i>	<i>Religion.</i>	<i>Habitat</i>	<i>Estimated total population.</i>
Dogras (or Hill Rajputs)	Hindus ...	Punjab Hills between Ravi and Sutlej	Figures not available.
Garhwalis	... Hindus ..	Garhwal Hills north of Delhi	500,000
Gurkhas	.. Hindus ..	Nepal ..	3,500,000
Jats ..	... Hindus ...	Punjab and United Provinces	2,000,000
Kumaonis	... Hindus ...	Hills north-east of Delhi	Figures not available
Madrasis	... Christians, Hindus and Mohammedans	Madras Presidency	40,000,000
Mahrattas	... Hindus ...	South India round Poona and Belgaum	4,000,000
Hindustani Mohammedans	Mohammedans	U.P. and round Delhi	1,700,000
Punjabi Mohammedans	Mohammedans	From Indus to Sutlej	8,000,000
Rajputana Mohammedans	Mohammedans	From Alwar, Bharatpur and Gurgaon	Figures not available
Pathans	... Mohammedans	North West Frontier	800,000
Rajputs	... High Caste Hindus	East and West Rajputana	3,000,000
Sikhs ...	... Sikh Religion	Punjab round Amritsar	3,000,000
Total omitting Gurkhas			64,500,000
			61,000,000

This total, however, includes many sub-classes which are not recruited; and the total population of the fighting classes at present enlisted is probably not more than 40,000,000. The Punjab supplies over 60 per cent. of the combatant troops in the Indian Army to-day (omitting the 19,000 Gurkhas who are recruited outside India); the United Provinces supply

about 11 per cent. ; Rajputana, Kashmir, and Bombay each provide about 5 per cent. ; the North-West Frontier rather less than 5 per cent., and Madras about 3 per cent. Bengal and Assam are not represented. During the war, the proportions of combatants who enlisted bore a close resemblance to these present-day figures. About seventy-five per cent. of the total number of combatants raised in British India came from the Punjab and United Provinces : Bengal with a population larger than that of Great Britain only provided 7,000 out of the total of 683,000.

*The Political
Divisions*

India comprises British India and the Indian States. British India consists of the Governor's Provinces : Madras, Bombay, Sind, Bengal, the United Provinces, the Punjab, Behar, Orissa, the Central Provinces and Berar, Assam, Burma and the North-West Frontier Province, together with the minor provinces or administrations, British Baluchistan, Delhi, Coorg, Ajmer-Merwara, and the Andaman and Nicobar Islands.

The Indian States comprise some 562 states varying in size and importance from the great states of Mysore, Hyderabad, Gwalior, Baroda and Kashmir, down to properties of a few acres, and contain 81 millions out of the 353 millions who live in India. They are not British territory ; their peoples are not British subjects ; their relation to the Paramount Power, the British Crown, is based on Treaties or other written documents. The Crown reserves the right to decide the succession to a throne or to intervene when there is gross misgovernment in a State ; it controls the foreign policy of all ; British Residents or other Agents are appointed to advise the ruling Princes. Otherwise the Sovereignty of the rulers is unrestricted in regard to internal affairs.

THE FUTURE GOVERNMENT OF INDIA

Detailed political discussion is not within the scope of this book, but reference must be made to the new government of India, because of its bearing on the defence responsibilities of the Empire. General principles of policy were announced at the close of the second session of the Indian Round Table Conference, by the Prime Minister, on December 1st, 1931, and later elaborated in the India White Paper of March 1933, and

these with modifications suggested by the Joint Parliamentary Committee became the basis of the Government of India Act (1935). Taking first the Governor's Provinces, these from April 1st, 1937, became responsibly governed units, "enjoying the greatest possible measure of freedom from outside interference and dictation in carrying out their own policies in their own sphere," but with certain safeguarding powers entrusted to the Governors to ensure the maintenance of law and order and of certain other essentials of sound government. The North-West Frontier Province enjoys the same status as other Governor's Provinces, "due regard being taken as to the necessary requirements of the Frontier and as to the powers to be entrusted to the Governor in order effectively to safeguard the safety and tranquillity of the Province." Sind, a portion of the Bombay Presidency, which has a population of almost 4 millions who form a quite distinct racial section, has been constituted into a separate Province and similarly Orissa has been separated from Behar.

With regard to the central government, a Federation of the self-governing Provinces and the Indian States is to be introduced as soon as a sufficient quota of the States are prepared to enter such a Federation. The Indian Princes gave, at the first session of the Round Table Conferences, their general assent to such a Federation provided that their interests were safeguarded. The Federal Government of Greater India will be responsible government subject to certain safeguards and reservations. The rights of the rulers of Indian States, and the rights of minorities must be permanently safeguarded ; the subjects of Defence, External Relations and Ecclesiastical Affairs must be reserved and under the control of the Governor-General ; and as he must be able, in the last resort, to maintain in an emergency the tranquillity of the State and must similarly be responsible for the observance of the constitutional rights of minorities, he is granted the necessary powers for this purpose. The transfer of financial responsibility is subject to such conditions as will ensure the fulfilment of existing obligations and the maintenance unimpaired of the financial stability and credit of India.

The importance of the reservations with regard to External Relations and Defence requires little comment. The

relations between India and other countries, particularly those in the East, concern the whole Empire and might easily involve Great Britain in international complications or in a war. Similarly, the defence of India is not merely a local affair. India is unlike the Dominions, in that it possesses a land frontier where there are military problems of great magnitude, which the Indian Army cannot sustain without a backing of highly trained and equipped European troops. Further, it is a congeries of races and religions, not united by ties of race or language, easily susceptible to propaganda; and internal strife is very frequent. For the maintenance of law and order, the British Army in India, which has no prejudices one way or another, is the ultimate resort. Also, the Indian Army contains many races, has no common language, and is drawn from the fighting classes of India which only represent a small part of the total population of the country and that part is the least voluble in political matters. Until an adequate flow into the higher ranks of trained and experienced Indian officers of the proper class has been assured, a large proportion of British officers must be retained in the Indian Army. And finally, the defence of India involves the whole arch of British territory round the Indian Ocean of which India is the keystone.

*The Employ-
ment of
Indian
Troops
outside India*

With regard to this last point. The Parliamentary Joint Committee (1934) referred in its report to the employment of Indian troops outside India. They pointed out that there have been many occasions on which Indian contingents have been lent for operations overseas, in which considerations of Indian Defence have not been involved. They recommended and the Act reiterated that, in future, the decision whether the occasion involves the defence of India in its widest sense and whether the troops can be spared should be within the exclusive sphere of the Governor-General's responsibility. Nevertheless, the Governor-General is directed in his Instrument of Instructions to ascertain the views of his ministers on this, and also on the general policy of appointing Indian officers to the Indian forces.

*Indianiza-
tion*

The present situation with regard to this second point is that the equivalent of one Cavalry Brigade and one Infantry Division complete with all arms and ancillary services is to

Indianized. As a means for achieving this object, the Indian Military Academy was opened on October 1st, 1932, and trains cadets for all arms of the service ; and 3 cavalry regiments, 4 engineer and 2 signal units, and 12 infantry battalions have been selected for complete Indianization. In addition, a corps of Indian artillery is being formed, which at present consists of 1 Field Brigade, but will ultimately consist of 3. A start has also been made on the formation of a squadron of an Indian air force.

With regard to the position of the Commander-in-Chief, ^{The} the Act stated that, though the executive authority of the ^{Commander-} Governor-General includes the Reserved Department of ^{in-Chief} Defence, the command of the forces in India should continue to be exercised by a Commander-in-Chief appointed by His Majesty. The Governor-General is directed to obtain the view of the Commander-in-Chief on any matters relating to defence and to transmit these to the Secretary of State at the Commander-in-Chief's request.

THE PROBLEMS OF DEFENCE

The nature of the various military responsibilities which ^{i. Sea De-} require normally in India a regular garrison of 59,000 British ^{fence} troops, together with the Indian Army 159,000 strong, will be described in more detail in the following pages.

The responsibility for the defence of the coasts, ports, and of the maritime trade of India rests almost entirely on the Imperial Navy and on the line of Imperial naval bases from Great Britain to the Far East. Towards the expenditure on this form of national insurance the government of India pays £100,000 each year. It also maintains the Royal Indian Navy which may at some future time be developed into an important auxiliary force. Though it has now attained a combatant status, its strength, as yet, only consists of four patrol vessels and a few surveying vessels. Indian military units are stationed at the naval base of Hong-Kong and in Malaya as part of the garrison of these places, but these units, when so employed, are paid and maintained by the British Exchequer.

Internal security problems attain, in India, a magnitude ^{ii. Internal} which is unparalleled in any other part of the Empire. ^{Security} Hindu- Moslem communal disorder, arising from the lack of a mutually

tolerant attitude towards one another's religious rites and customs, is frequent and of so serious a nature that troops are required on many occasions to come to the assistance of the police in quelling or preventing riots. Further, unrest fomented by propaganda, designed to create disorder as a step towards the attainment of political ends, may require, from time to time, the stabilizing effect of the presence of troops. The responsibilities in these various cases are very great. Lives and property must be secured; the long lines of communication between the various military centres in the disturbed area must be safeguarded; railway centres, arsenals, factories, etc., must be protected. So manifold are these duties in peace and so vital would it be in war to ensure orderly conditions within India that about one-third of the total Army in India is earmarked for the maintenance of Internal Security. In this part there is a slightly larger British element than Indian element—the proportion being roughly eight British soldiers to every seven Indian soldiers—due to the fact that in the religious quarrels (which are the most frequent) the British soldier is a neutral and cannot be suspected of favouring either side.

iii. *Tribal Attack*

India is unique also in the character and magnitude of its frontier problems. Only on its North-West has it important land communications with the rest of Asia, and these communications reach India through territory which, while within the Indian political boundary, is outside the area which its government administers. This territory is inhabited by tribal groups whose tradition it is to take what they require by raiding; who are easily stirred by their mullahs to follow a natural bent for guerilla warfare, and who provide a day to day responsibility for the defence forces in that region. Security from tribal raids on the North-West Frontier Province which lies mainly between their territory and the Indus; the protection of the communications in and through the region and the prevention of all those tribal activities which would handicap the mobilization or movement of our forces are responsibilities which demand the allocation of approximately one-third of the Army in India as Covering Troops. Behind these Covering Troops which are garrisoned in or near the region and who can carry out such protective and punitive

measures as are necessary, mobilization, in the case of some major danger, can proceed unchecked.

For such major operations, as an attack by Afghanistan or Russia, or a combined attack by all the tribal groups, a Field Army of four divisions and four cavalry brigades is available after mobilization. ^{iv} *External Attack*

THE NORTH-WEST FRONTIER

Though the North-West Frontier of India extends from the Pamirs to the sea, only that part where India and Afghanistan are contiguous presents military problems of importance. South of this region, a vast tract of semi-desert separates Persia from India.

The frontier between India and Afghanistan starts at the north-east corner of the latter where "the pothandle" known as the Wakhan, just prevents Russia from having contact with India. The Hindu Kush mountains stretch south-westwards from this region across northern Afghanistan; southwards, the frontier extends through a tangle of mountain ranges, penetrated only by a few high passes, until the Kabul river is reached. Between the Kabul and Kurram rivers is the Safed Koh range which runs almost due east and west, and to the south of the Kurram the frontier is again a formless mass of mountains, having a general trend towards the south-west, and eventually merging into the Suliman range.

Fifty to 150 miles to the east of this tangled mass of highlands flows the river Indus, which rises north of the Himalayas, but breaks through them, and then takes a general south-west course towards the sea. The tributaries on its left bank, rising in the Himalayas, flow across the plains of northern India; the tributaries on the right bank rise mainly in the mountainous regions and plateaus of Afghanistan, and break their way through the highlands and ranges which separate India from that country. Of these tributaries the Kabul river, which enters the Indus at Attock, is the most important and it, in turn, has two notable tributaries, the Kunar and the Swat. Further to the south is the next important tributary, the Kurram river, flowing from the highlands south of Kabul through the Kurram valley to enter the Indus. The Tochi, a tributary of the Kurram,

should also be noticed. Further south again lies the Gomal, joining the main stream rather to the south of Dera Ismail Khan.

The Indus itself, close to Attock, cleaves its way through ravines, and is a torrent impossible for navigation. Below Attock it widens to about 100 yards and, further south, near Kalabagh, to a mile.

The boundaries of India on the North West must be considered next. They consist of

*The two
boundaries
of India*

- (1) The boundary agreed on and delimited in 1895 by the British Government and Afghanistan, and known as the "Durand Line." This boundary separates the country for which the King of Afghanistan is nominally responsible from the country for which the Government of India is nominally responsible. India, however, does not actually administer all the region to the east of this line, so we must consider, in the second place, the boundary up to which administration is actually carried out, and which is known as the administrative boundary.
- (2) The administrative boundary lies generally well to the east of the Durand Line, north of the Kabul river. Between the Kabul river and the north-east corner of Baluchistan it approaches the Durand Line most nearly in the regions of the important passes, while, further south, in Baluchistan the two boundaries coincide.

There is thus a large elongated tract of country to the north of Baluchistan lying between the two boundaries, which is not administered, though it lies within the political boundary of India. This region, which covers about 25,000 square miles and has over three million inhabitants is only under a loose form of political control which varies in effectiveness in different parts. This political control is exercised through Political Agents who are responsible for the Malakand (including the Indian States of Dir, Swat and Chitral), the Khaibar, the Kurram, North and South Waziristan respectively.

*The passes
through the
N.W.F.*

Starting from the north, the most important passes are the Kilik (15,800 feet); the Baroghil (12,500 feet); and the Dorah (14,800 feet) which leads from Faizabad in Afghanistan into Chitral whence there is a route southward to Nowshera

by the Malakand Pass. The difficulty and altitude of these are so great that their use by large forces at any time is improbable.

South of these, there come in order, the five great gateways to and from India.

The Khaibar route runs from Peshawar through Jamrud, ¹ *The Khaibar* where the pass begins, to Landi Khana on the Afghan border. The 35-mile stretch from Peshawar to Landi Khana is the chief military and commercial land route between India and Afghanistan. A railway and two motor roads traverse the pass; garrisons are maintained at Jamrud, Shagai, Landi Kotal and intermediate points, and Peshawar at the Indian end is one of the great military cantonments of India. Beyond Landi Khana lies the Afghan cantonment of Dakka and there is a road, *via* Jelalabad, to Kabul suitable for light mechanical transport. The distance from Peshawar to Kabul by the Khaibar is 200 miles.

The next pass is the Kurram through which a motor road ² *The Kurram* runs from Thal to Parachinar. From Parachinar to Kabul is only 100 miles, but the route over the Paiwar Kotal is difficult, and is merely a camel track blocked by snow in the winter. The railway to the Kurram crosses the Indus at Khushalgarh, breaks gauge at Kohat, and proceeds on to Thal. There is a garrison at Parachinar¹ and the line of communication with Thal through the Kurram lies in the territory of the Turi who are Shiah Mohammedans and friendly. The route is, however, fairly closely flanked by the Afghan salient of Khost.

The Tochi river valley leading from Bannu towards Ghazni ³ *The Tochi* is a route which runs through extremely difficult country and is no more than a camel track. A narrow gauge line connects the Indus at Mari Indus (where the Kalabagh bridge has been constructed) with Bannu.

The Gomal route leads from Dera Ismail Khan to Ghazni, ⁴ *The Goma* but this, like the Tochi, is unsuitable for large military forces. It is used by considerable numbers of Ghilzais on their periodic winter migration to the plain of the Indus.

The Bolan Pass, a narrow gorge 56 miles long, joins Sibi ⁵ *The Khojak and Bolan* with Quetta, the largest military station in India, and is

¹ Kurram Militia.

traversed by a motor road and railway. From Quetta to Chaman on the Afghan border, the road crosses and the railway tunnels through the Khojak Pass. Facing Chaman, which is a garrisoned station, there is the Afghan fort of Baldak, and a road suitable for mechanical transport joins Chaman to Kandahar.

*Lateral
Communications*

In addition to these, there are important lateral communications of which the most important is the railway which runs parallel to the Indus along its east bank and, by the five bridges at Kotri, Rohri, Kalabagh, Khushalgarh and Attock, gives access to the frontier.

In the frontier region itself there is a motor road from Peshawar to Kohat (which passes through tribal territory), and leads thence to Bannu and Dera Ismail Khan. At Bannu, this road makes junction with the important circular road through Waziristan, which passes through Idak, Razmak and Jandola to Tank. An offshoot from this road runs to Wana, which is the Headquarters of a Brigade, and Razmak also has a more direct road to Wana.

The Harnai-Fort Sandeman and Quetta-Fort Sandeman roads lead to the Zhob (a tributary of the Gomal) and there is now a motor road, recently completed, from Fort Sandeman via Gul Kach on the Gomal to Tanai on the Sarwekai-Wana road, which forms an important connecting link between Quetta and Waziristan.

One other route requires mention, though its importance is more commercial than strategic. This is the railway which runs across Baluchistan, from Spezand Junction, and terminates at Duzdap 100 miles over the Persian frontier. Owing to financial and other difficulties with Persia, trains at present only run as far as the Indian side of the boundary.

The tribes

The number of fighting men among the tribes of the North-West Frontier amounts perhaps to half a million, of whom not more than 200,000 are armed with firearms. The tribes fall naturally into three groups :—

(a) *The
Northern
Group*

(1) The tribes of the three small states of Chitral, Dir and Swat which are under the fairly effective control of their rulers, the Nawab of Chitral, the Wali of Swat and the Nawab of Dir, and hence can be kept reasonably quiet. These tribes occupy regions north of the Khaibar where the

height of the passes and the general characteristics of the terrain make the danger of invasion from Afghanistan comparatively remote. In Chitral there is a small regular garrison which is supported by a battalion in the Malakand.

(2) From immediately north of the Khaibar to the southern border of Waziristan the frontier region is inhabited by tribes which are intensely democratic in character and are not susceptible of real control by their own tribal chiefs. Hence, in this region the work of the Political Agents of the government of India is peculiarly difficult, and the tribes are the most troublesome. Unfortunately also, it is the region of greatest strategic importance because it is pierced by four out of the five chief passes into India. (b) *The Central Group*

North of the Khaibar there are the Mohmands, a truculent and excitable group easily fanned into flame by religious propaganda, who live partly in Indian and partly in Afghan territory and who are well placed for raiding activities into the Peshawar plain. Their neighbours, the Utman Khel and Bajauris are also frequently troublesome, and it is noteworthy that it was among these that the Red Shirt Movement founded by Abdul Ghaffar Khan first and most easily took root. During the last few years operations against the Mohmands have been necessary on several occasions, and have led to the construction of a motor road from Peshawar through Ghalanai towards the upper Mohmand country.

South of the Mohmand territory is the country of the Afridis through which the Khaibar runs. They, with the Orakzai, occupy the Tirah and form perhaps the greatest compact group of fighting material on the frontier, their armed tribesmen numbering about 80,000. In this region we have no garrisons except along the Khaibar and, since 1930, in the Kajuri Plain to which a large number of Afridis migrate in the winter—the latter garrison enabling us to exercise some measure of influence.¹ The motor road from Peshawar to Kohat passes through a narrow peninsula of territory occupied by these tribes.

The Upper and Middle Kurram Valley is inhabited by the Turi, who are Shiah. They are surrounded by Sunni tribes

¹ Because it enables us to use control of the annual migration to the grazing grounds there as a weapon.

who regard them with suspicion and dislike, and they are consequently well disposed to us because they rely on us for support.

South of the Kurram is Waziristan with its population of Mahsuds and Wazirs who, up to the introduction of a modified forward policy, gave much trouble. They include about some 60,000 armed men. In this region there are garrisons at Razmak, Wana and the Tochi Valley.

The Southern Group

(3) South of Waziristan the administrative and political boundaries coincide and the tribes are under some form of loose administrative control, and are rarely troublesome. There is a garrison of about a Brigade in the Zhob, mainly at Fort Sandeman which is now connected by rail and road with Quetta.

The tribes in the neighbourhood of Quetta and Chaman are not particularly warlike or troublesome; and to the south and west of this region the State of Kalat is ruled by its own Khan and is under a satisfactory measure of control.

*The policies on the Frontier
(a) The Forward Policy*

It is clear, therefore, from the foregoing, that the chief tribal problems of the frontier are those associated with the central group whose territory extends from the Mohmand country in the north to the southern boundary of Waziristan. To the north of this region the rulers have their tribes under some measure of control, and by subsidies paid to these rulers or by military assistance, political help and advice rendered to them, reasonably stable conditions can be maintained. To the south of the central region we hold and loosely administer up to the Durand Line through tribal chiefs and jirgahs (tribal councils). This "*Forward Policy*," introduced in the south by Sir Robert Sandeman, has been so successful in Baluchistan that its adoption in the central group has frequently been advocated. Geographical conditions are, however, much more difficult in the central region, the tribes are more truculent and better-armed, and the introduction of a Forward Policy throughout the whole frontier would require a long, slow and expensive advance, with the construction of many roads and railways before it could become effective. Further, it would be fiercely resisted by the tribes themselves, and would probably entail an expenditure which the Indian Government could not face at present.

In complete contrast to the Forward Policy in Baluchistan there is the Close Border Policy which has up to recently been carried out with regard to the Mohmand country and the Tirah. Here, apart from the Khaibar, the Kajuri Plain and the road from Peshawar to Kohat, little attempt has been made to interfere with or control the tribes. The administrative commitments of the Indian Government practically cease at the Administrative Boundary and the tribes are allowed to do as they please, provided they refrain from committing outrages on our territory. Raids or hostile acts must, of course, be punished, and retaliation in the form of bombing, the seizure of hostages, the closing of our administrative boundary to trade with the tribesmen concerned, or even, in the case of some major trouble, a military expedition may be required. When punishment has been meted out operations cease.

In Waziristan, as on the other parts of the frontier, political officers keep in contact with the tribes through the jirgas or tribal councils, and are backed, in the maintenance of order, by battalions of Scouts and Militia, under British officers, and by Khassadars, irregular levies locally recruited who supply their own firearms. In Waziristan, however, these political forces are supported by garrisons of regular troops stationed at strategic and dominating points *within* the tribal territory, such as Wana and Razmak; and, to enable these regular garrisons to take rapid action, a general policy of road construction has been carried out. The circular road, which has been mentioned, runs through the heart of the Mahsud country and has been valuable, not merely because of the increased mobility which it provides for the regular forces, but also because it has opened a channel of trade and movement. Contracts for road construction and maintenance have brought money to the tribes, and hence have created a demand for some of the amenities of civilization such as the Ford car and the picture house. At the same time, however, the policy of road building has been resisted from time to time by certain sections as a curtailment of their independence and isolation; and the protection of the roads and of convoys moving along them are, at times, a considerable military obligation.

Seven out of the eight squadrons R.A.F. in India are stationed along the frontier. Thus, there are two bomber

(b) *The Close Border Policy*

(c) *The Half Forward Policy in Waziristan*

The air forces on the Frontier

squadrons at Kohat and two at Risalpur ; one Army co-operation squadron at Peshawar and two at Quetta.¹ The bomber squadrons are placed, therefore, near the edge of the Mohmand country and the Tirah, and have played an important part in the punitive measures which are so frequently necessary against the inhabitants of those regions. No tribe is completely inaccessible by air ; concentrations can sometimes be broken up before they gather momentum ; punishment can be executed. These are important influences which produce a steadying effect. But the effect of air action, though valuable, must not be exaggerated. It is handicapped by the nature of the terrain which provides ample cover to which the tribesmen can retire ; if frequently employed, its terrors cease to exist ; flying has to be carried out at so great an altitude owing to the hills and " air pockets " that little accuracy of aim can be ensured ; prisoners cannot be taken, nor hostages or loot recovered. For these reasons its employment, though cheaper than the use of small military columns, is more transient in its effects. It is a useful auxiliary to, but not a complete substitute for ground operations.

*The military
forces on the
Frontier*

The covering force on the frontier normally consists of the following infantry brigades :—

- (1) Peshawar district.—Three Brigades at Peshawar, Nowshera and Landi Kotal respectively.
 - (2) The Kurram.—Two Brigades.
 - (3) Waziristan.—Three Brigades at Razmak, Bannu and Wana respectively.
 - (4) The Zhob.—One Brigade at Fort Sandeman and Lorelai.
- In addition to these there are the Scout and Militia organizations in Chitral, the Kurram, the Tochi, Waziristan and the Zhob, which have been mentioned ; also the Khassadars for road protective duties and the Frontier Constabulary, an armed police or gendarmerie for the protection of the administered area.

*The Field
Army*

For major operations there is the Field Army of four divisions found from the Rawal Pindi, Meerut, Baluchistan and Deccan districts and of five cavalry brigades, together

¹The remaining Squadron (an A.C.) is at Ambala

with the necessary proportion of other units for Army troops. As a possible source of reinforcement for this, there are the Indian State Forces which could provide the equivalent of twenty mounted regiments and twenty-seven battalions. There are also the reserves and the Indian Territorial Force (about 19,000).

The remainder of the Army in India is earmarked for ^{Internal} internal security duties and has, as a second line, the Auxiliary ^{security} Force of British Volunteer units. (Strength about 34,000.) ^{troops}

AFGHANISTAN IN RELATION TO THE NORTH-WEST FRONTIER

Afghanistan provides additional problems and military responsibilities on the frontier. It has been seen that some of the tribes in the frontier region, such as the Mohmands, inhabit country on both sides of the Durand Line and move freely backward and forward across that line. In this way punishment can be evaded and disorderly elements pass from one country to the other. Hence the lack, in the past, of a stable and effective government in Afghanistan has always provided a crop of troubles within our boundary. Indeed, it is obvious that the disarmament of those tribes for which India is politically responsible could not be effective until conditions in Afghanistan are more settled, and, hence, that no complete Forward Policy will be practicable until that state of affairs exists. As long as orderly conditions are lacking, there is always the possibility of tribal trouble, perhaps fanned by Sunni mullahs in Afghanistan, swelling to larger proportions and even involving the two countries in hostilities. Further, there is the fact that Afghanistan is a buffer state which separates Russia from India, and that it is therefore a region which might become a theatre of military operations on a large scale.

The breadth of Afghanistan from the Russian frontier north of Herat to the Khaibar Pass is 600 miles; its greatest length from north to south is about the same, and its area is some 270,000 square miles or approximately one and a half times that of Germany. It is roughly quadrilateral in shape, with a narrow peninsula (the Wakhan) extending eastwards from its north-east corner. Along part of the diagonal, from ^{Physical} ^{Features}

the Wakhan to the extreme south-west of Afghanistan, lies the great mountain range of the Hindu Kush, the main watershed of the country, which in its western parts is known as the Koh-i-Baba and Band-i-Baba ranges.

On the northern slopes of this great mountain barrier rise : *Rivers*

(1) The Oxus which has its source in the Pamir Plateau, forms part of the northern boundary of Afghanistan and eventually flows into the Sea of Aral. It is navigable for small steamers as far up stream as Termez. (2) The Murghab which rises in the Koh-i-Baba range and flows into the Kara Kum desert where it dries up. A railway from Merv to Kushk Post on the Afghan boundary follows the course of this river. (3) The Hari Rud flows from the Koh-i-Baba westwards to the neighbourhood of Herat where it turns north and eventually dries up in the desert near Tejend. Part of the route from Meshed to Herat runs along this river. To the south of the Hindu Kush there are the Kunar, which rises in the Pamir Plateau and meets the Kabul near Jelalabad ; the Kabul which rises in the Hindu Kush west of Kabul and flows past Jelalabad through a narrow gorge to the Peshawar plain, and thence to Attock where it joins the Indus : the Helmand which rises in the Koh-i-Baba range and flows south through semi-desert (the Registan) to the plain of Seistan where it disappears in marshes.

The Hindu Kush is not merely a physical barrier between the northern and southern parts of Afghanistan ; it is also an ethnological boundary. The provinces of Badakshan and Afghan Turkistan to the north of the Hindu Kush are inhabited by Tajiks, Uzbeks and Turkomans who have no racial affinity with the people south of the Hindu Kush but are kinsmen of the inhabitants of the Soviet republics of Tajikistan, Uzbekistan and Turkmenistan. Further, they are Shiah Mohammedans and hence an object of dislike, on religious grounds, to the predominantly Sunni population of the south. This division, on racial and religious lines, and the ties of blood and religion which connect the northern races with peoples in Russian territory not merely make internal government difficult but are facts which may have serious political and strategic consequences in the future.

South of the Hindu Kush there are the more warlike

*Population
and races*

tribes—the Shinwaris and Mohmands round Jalalabad, the Mangals in Khost, the Durani in the provinces of Kandahar and Farah and the Ghilzais, the camel owners, round Ghazni. The Hazaras who inhabit part of the mountainous region in central Afghanistan are noteworthy because they form a small Shiah enclave and some of them migrate to India where they have been enlisted in the Indian Army. Pushtu is the prevailing language south of the Hindu Kush.

The total population is estimated at 11 millions, of which about 80,000 are in Kabul, 60,000 in Kandahar, 46,000 in Mazar-i-Sharif, and 30,000 in Herat.

Roads

There are few roads suitable for motor transport or even for wheeled vehicles. They are generally so covered with loose boulders that only pack transport is practicable, and most of them are blocked with snow for some portion of the year.

The most important are as follows :—

1 From Russian Turkistan

- (a) From rail at Askabad through Persia *via* Meshed to Herat.
- (b) From rail at Merv *via* Zulfikar along the valley of the Hari Rud to Herat, and thence by a difficult track, unsuitable for large forces, to Kabul (250 miles)
- (c) From railhead at Kushk Post over the Ardawan Pass (70 miles) to Herat by a road now suitable for mechanical transport.
- (d) From the Termez railhead *via* Haibak and the Ak Robat Pass or *via* Kunduz and the Khawak Pass to Kabul. These routes are being made into good motor roads. The passes in the Hindu Kush are over 11,000 feet, and only clear of snow for a few months in the year.

2 From Afghanistan into India

- (a) Kabul to Landi Khana suitable for motor transport and thence by motor or rail to Peshawar (200 miles)
- (b) Kabul to Parachinar (100 miles) by the Shutargardan and Paiwar Kotal Passes—a camel road, blocked by snow during the winter.
- (c) Ghazni to Parachinar by the Mirzakai Pass—a camel road, closed by snow in winter
- (d) Ghazni to Matun and Thal *via* the Khiddi Ghakhai Pass—a camel road, closed by snow during the winter
- (e) Ghazni to the Tochi Valley by the Kotanni Pass—a camel road.
- (f) Ghazni to the Gomal by the Sarwandi Pass—a camel road
- (g) Kandahar to New Chaman and Quetta, suitable for mechanical transport

In addition to the above, the following are very important :

- (1) The road joining Kandahar to Ghazni and Kabul (330 miles) which is suitable for wheeled vehicles and open throughout the year.
- (2) The road from Herat through Farah and Gishk to Kandahar (530 miles). This road passes through the less mountainous part of Afghanistan, and is, at present, from the physical point of view, the least difficult for the movement of troops, but has a long waterless stretch between Farah and Gishk.

Prior to the recent troubles in Afghanistan, a process of modernization was taking place. The army had been fitted with some modern equipment and a few aeroplanes; and aerodromes had been established at Kabul, Kandahar and Jalalabad. The government arsenal at Kabul was capable of producing field guns and manufactured at least one anti-aircraft gun. Routes for a number of motor roads and railways from Termez to Kabul and from Herat to Kandahar were being surveyed by French and German engineers. Telegraphic communication was established between Kushk and Herat, and the construction of telegraph lines from Kandahar to Herat and Kandahar to Kabul was in progress. There were Turkish military advisers with the Afghan Army.

This process of modernization was cut short by the civil war which resulted in the flight of Amanulla, and was pursued with more caution by his successor, the late Nadir Shah. While he was perhaps the ablest man in the country (he was C.-in-C. of the Afghan forces in the Third Afghan War and later Minister in Paris) he had still much leeway to make up before he obtained complete mastery over the country, and his murder in 1933 appeared likely to plunge Afghanistan once again into a state of civil strife. His son and heir, Muhammad Zahir, has, however, shown political sagacity and steadiness and has maintained his father's policy of cautious progress.

The Army consists of about 100,000 regular troops of all arms, including a small air force officered by Afghans trained in Europe. It serves for two years with the colours and eight with the reserve. It is unlikely, however, to be sufficiently equipped or trained to meet the force of a foreign power in the open, and the real strength lies in the warlike tribes and the mountain barriers of the country. The tribes, however, though valuable within their own localities, are unlikely to give much assistance elsewhere, and thus co-ordinated effort is almost impossible.

The chief towns and garrisons are :—

(1) Kabul—the capital, 6,000 feet above sea level, 190 miles from Peshawar, through the Khaibar Pass; 230 miles from Kohat through the Kurram; 320 miles from Kandahar *via* Ghazni, and 450 miles from Quetta. It is connected by tele-

*The Afghan
Army and
garrisons*

phone with Peshawar, possesses an arsenal for the manufacture of field guns and small arms, and an aerodrome.

(2) Jalalabad and Dakka, garrisoned towns on the Kabul-Peshawar road.

(3) Ghazni—7,300 feet above sea level on the main road between Kandahar and Kabul and 130 miles from Bannu. There are garrisoned posts at Ali Khel near Paiwar, Urgun at the head of the Tochi and Matun in the province of Khost.

(4) Kalat-i-Ghilzai on the Ghazni-Kandahar road.

(5) Kandahar—3,500 ft. above sea level, 70 miles from Chaman and 150 miles from Quetta. There is a garrison at Baldak Fort a few miles from Chaman.

(6) Herat—the chief commercial centre of northern Afghanistan is situated in the Meshed Herat gateway between the Hindu Kush and Elburz mountains, and at the entrance into South-Eastern Afghanistan. It is 3,000 feet above sea level and 70 miles from the Russian railhead at Kushk Post. It is the junction of routes from Merv, Meshed, Kabul and Kandahar.

(7) Mazar-i-Sharif in the province of Afghan Turkistan, 40 miles south of the Russian railhead of Termez.

(8) Faizabad in the province of Badakshan lies across a difficult route from the Oxus to Chitral by the Dorah Pass.

*The future of
Afghanistan
in relation
to India*

By the treaty which concluded the Third Afghan War, Afghanistan became independent of British control over its foreign relations. Theoretically, therefore, it must stand or fall by itself. In practice, however, its position as a buffer between Russia and India, gives it so great an importance in relation to Indian defence that any attempt on the part of the Soviet government to absorb part of the country is likely to involve us in military responsibilities. British and Indian interests will, therefore, be best served by the establishment of a strong Afghan government, capable not merely of maintaining order among the tribes on its side of the frontier, but competent also to deal with any threat of invasion into the northern provinces, or any possibility of those provinces being absorbed into the Soviet Republics to the north. It is desirable, therefore, that the development of communications should be accompanied by an increase in the strength and efficiency of the government, so that if the routes from Russia

to India are made suitable for the passage of large military forces, Afghanistan may be strong enough to defend them. The entry of both Russia and Afghanistan into the League of Nations, as members, in 1934, has at least brought both countries into an organization which maintains a machinery for the settlement of disputes and the prevention of war.

RUSSIA AND THE NORTH-WEST FRONTIER

The Russian threat to Afghanistan and hence to India which preoccupied the minds of statesmen during the nineteenth century has, at any rate for the present, largely disappeared. The development of her internal resources, the protection of her territories and interests in the Far East, the implications of the recent German-Japanese pact against Bolshevism are enough to divert the attention of the U.S.S.R. from any adventures southwards towards the Indian Ocean.

In the event, however, of military operations by Russia against India, the important available routes of advance are those which issue from the Russian railheads at Kushk Post and Termez. From the former runs the road through Herat, Farah and Girishk to Kandahar; from the latter run the alternative routes by the Ak Robat and Khawak Passes to Kabul. The former skirts the western end of the Hindu Kush and is easier, but has a long desert stretch between Farah and Girishk. The distances along this route from Chaman are : Kandahar, 72 miles ; Girishk, 147 miles ; Farah, 312 miles ; Herat, 461 miles ; Kushk Post, 530 miles. The routes by Termez and Kabul to Landi Khana are approximately the same length, but have to cross the high mountain passes of the Hindu Kush. The difficulties of such extended lines of communication, in a country where roads are poor, where railways do not exist and where presumably the invaders would be harassed by tribal attack, would be great but not insuperable. The military strength and resources of Russia could eventually wear down the Afghan resistance unless Afghanistan were supported by India. This fact, together with the geography of the country, must be taken into account in considering what the defence arrangements of India should be. Merely to hold the passes in the North-

*Possible
lines of
advance*

West Frontier would enable Russia to swamp Afghanistan, consolidate her position there and, at leisure, build railways and roads in preparation for an attack on India. Hence, it is more than likely that, at any threat of a Russian invasion of Afghanistan, India would be deeply involved and the Field Army would take up a position which would enable it to co-operate with the Afghans and, at the same time, protect the North-West Frontier. The most satisfactory positions for this purpose would be those which would prevent the Russians from debouching in force from the passes of the Hindu Kush and from advancing across the Helmand on Kandahar. The waterless stretch of 150 miles between Farah and Girishk on the Helmand would be a formidable obstacle to the Russian advance along the southern route, and would greatly assist the defending force.

The progress of such a war would depend, no doubt, largely on the available communications. Great strain would be placed on the lines running through the Khaibar and Khojak to Landi Khana and Chaman respectively, which would be the only railheads for the Field Army. Further, the latter line has only a daily capacity of approximately half that of the Khaibar line owing to the Khojak tunnel where steep gradients and bad ventilation prevent the use of full sized trains. Also, the remainder of the lines of communication would be over roads which are generally impassable for motor transport. It would therefore be desirable to supplement or improve existing communications, as by extending the railway from Chaman to Kandahar (70 miles) and by improving the road from Landi Khana to Kabul.

THE ASSAM FRONTIER

Eastwards from Kashmir to the borders of Assam no military problems of frontier defence exist. The swamps and jungles at the foot of the Himalayas, the friendly native states of Nepal, Sikkim and Bhutan, the great mountain barrier itself and the high plateau of Tibet form a defensive system unequalled in the world. On the northern frontier of Assam there are, however, hill tribes, such as the Lushais, Nagas, Lakhers, Abors, Miris, Mishmis, Khamtis, Akas and Daflas with a long record of murderous raids to their credit.

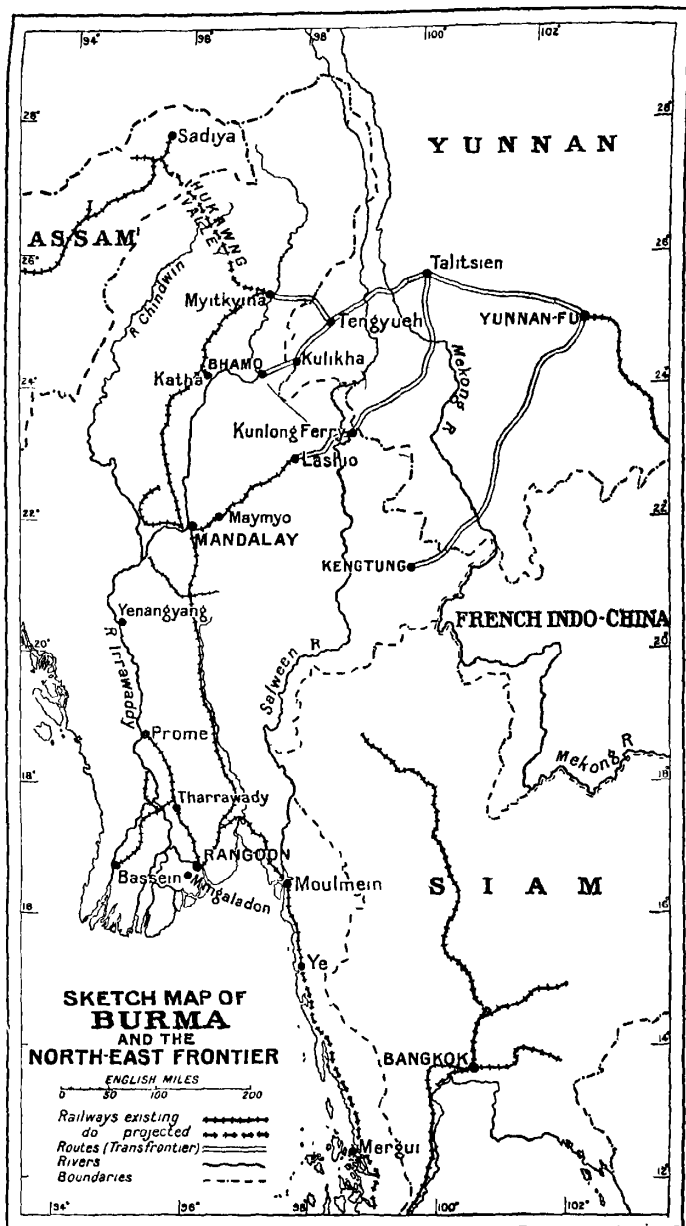
Their home is in a wild region almost completely unsurveyed in detail and not crossed by any route of great importance. Peace on this frontier is immediately dependent on four battalions of the Assam Rifles whose composition is nominally one half Gurkhas and half natives of the province, though actually at present it contains about 75 per cent. of Gurkhas. These battalions are stationed at important points along the frontier region, such as Sadiya, near the foot of the hills inhabited by Abors, Miris and Mishmis ; Aijal in the Lushai Hills ; Kohima in the Naga Hills ; and in the Balipara frontier territory. They maintain order in the region and carry out police duties, such as the prevention of opium smuggling. The nearest regular troops are two battalions of Gurkhas at Shillong, forty-eight hours away, by river, road and rail.

BURMA AND ITS FRONTIER

Burma, the basin of the Irawaddy and Salween Rivers, is divided for the purposes of administration into Upper Burma and Lower Burma, with a total area of 270,000 square miles and a population of $14\frac{1}{2}$ millions. Its most important physical characteristic is the series of almost parallel mountain ranges which run southward from the eastern end of the plateau of Tibet, and between which lie the channels of great rivers. The most westerly of these rivers, the Irawaddy, rises in a confused mountainous region to the north of Burma, and flows south to its delta, through a broad plain bounded on the west by the Chin and Arakan hills and on the east by the Shan hills and plateau and the Pegu Yomas. To the east of the Irawaddy runs the much shorter Sittang river, which rises in the Shan hills and flows south between the Pegu Yomas and the hills of Karenni. Further east still, the Salween, a great and for the most part unnavigable stream, flows in a narrow basin between high ground on both sides. The Mekong, which rises in Tibet, touches Burma, and is the boundary for about 110 miles between it and French Indo-China.

Owing to the configuration, by which rivers and mountain ranges lie mostly in a north and south direction, communications are easiest in these directions ; and much use is made of

Communications
1. River



Map No. 28.

the rivers for this purpose. On the Irawaddy, which is the chief line of communication in the country, a regular fleet of steamers runs as far north as Bhamo throughout the year, and even farther when the river is not in flood. Its most important tributary, the Chindwin, is navigable for small steamers as far as Homalin; and stretches of the Salween can also be used for navigation. A noticeable feature is the absence of bridges and consequent dependence on ferries on the Irawaddy and Salween.

The main line of the Burma Railway (metre gauge) starts ² *Rail* from Rangoon and strikes north to the Irawaddy at Mandalay (where there is a steam ferry across the river) and whence lines run north to Myitkyina and north-east to Lashio. Three interesting features require mention. The lack of railway communication to Bhamo, an important post near the frontier, the nearest railhead to which is Katha, is important in relation to the questions of defence of this frontier. The proposed Hukaung valley railway to join the Burma and Assam railway systems between Myitkyina and Makum is the second. The third point of interest is the lack of any railway connection between Burma and the Malay peninsula at present; and the proposal to extend the line which runs to Ye, farther to Mergui, and eventually to effect a junction with the line which runs southwards from Siam to Singapore is therefore, important.

In Lower Burma the waterways are the chief permanent ³ *Roads* means of communication and there is a scarcity of motor roads. During the dry season, from December to March, the empty paddy fields are baked hard by the sun and movement is easy, but, once the rains begin, they become impassable for wheeled vehicles. During the last few years, however, a programme of road construction has been carried out and there is now a motor road which follows the line of the railway from Rangoon to Mandalay and another from Mandalay through Prome to Allammyo. The lack of road communications elsewhere in Lower Burma increased the difficulties in bringing to an end the rebellion in 1931. In upper Burma there are a few roads, such as that which runs from Maymyo to Lashio, and thence for about 40 miles in the direction of Kunlong Ferry, but these are generally little more than cart tracks, passable by motor transport only in dry weather.

In fact, altogether, in Burma there are only about 2,000 miles of metalled roads.

Races

The chief races are the Burmans, the Chins, the Kachins, the Shans and the Karens. The Burmans, who are Buddhists, number about 10 millions and live chiefly in the basin of the Irrawaddy. They are quick witted, intelligent and attractive, but temperamentally unsuited to the strictness and regularity of army life, and are therefore not enlisted in the Burma Rifles. The Chins inhabit the country west of the Chindwin River. They are, in appearance and mental characteristics, not unlike the Gurkhas, are Animists in religion, and number about 530,000. They are enlisted.

The Kachins who live in the frontier region to the north and east of Myitkyina are perhaps the most warlike of the races of Burma. A punitive expedition was carried out against them in December 1914, and January 1915, but since then they have settled down and are enlisted in the army. They are small in stature, good fighters with a keen sense of humour and amenable to discipline. They number about 350,000.

The Shans who inhabit the Shan States on the eastern frontier are Buddhists, and number about one million. They are mostly a quiet simple folk, not enlisted in the army, and administered by their own hereditary chiefs or Sawbwas, assisted and advised by British officers.

The Karens occupy the five native states of Karenni and, like the Shans, are ruled by their own chiefs with the advice of a British Political Officer. Originally Animists, they have become ready converts to Christianity, through American mission schools. They are smart in appearance, intelligent, and good athletes, and are enlisted. Their population is about 1,400,000.

There are also about 200,000 Chinese and over 1,000,000 Indians in the country, the latter particularly being a disturbing element because they live on a lower standard of life and consequently tend to displace native labour and cause economic complications which lead to social unrest. The number of European and Anglo-Indians is about 20,000.

Defence

The defence of Burma has an intimate bearing on Imperial defence because it is one of our chief sources of petroleum within the Empire, and also because of its comparative proximity

to the naval base at Singapore. Its problems of defence are as follows :—

- (a) Defence of sea communications, which depends on the general naval position in the Indian Ocean and on the security of the Straits of Malacca.
- (b) The defence of Rangoon, which, owing to the physical configuration of the country, is the entrance and base of operations. The communications by rail and river northwards are therefore of great importance, and the construction of motor roads to supplement existing communications is very desirable.
- (c) Internal security. Political propagandist activities, playing on the general discontent caused by the economic depression, were no doubt partly responsible for the serious outbreak in 1931 which required almost a Division of troops to bring it to an end. Secret cults and societies are also a disturbing influence, which can create trouble. From an Imperial aspect, the oilfields at Yenangyang and the oil pipe line to Rangoon are particularly important responsibilities which must be guarded against sabotage in times of unrest.
- (d) The North-East Frontier.

The frontier of Burma borders for 370 miles on Siam, for 130 miles on Tonking and for 1,000 miles on the province of Yunnan in China. Siam, however, is a small friendly state, and Tonking is a French colonial possession dependent for its security and striking power on sea communications with France. Out of the remaining thousand miles only one section requires serious consideration. This is the region which lies between the junction of French Indo-China, Burma and Yunnan and Lat. 26° N. To the north of this, the frontier runs through country which is almost inaccessible.

This section is crossed by a few routes. Three of these radiate from Tali-Hsien in Yunnan to Myitkyina, Bhamo and Lashio respectively. The first, which is the chief trade route, runs from Myitkyina through Sadon (Fort Harrison) and across the Kam-bai-ti Pass (8,000 feet) to Tengyueh, a distance of 110 miles, and thence to Tali-Hsien. The second starts from

Bhamo on the Irawaddy, crosses the frontier at Kulikha and runs to Tengyueh (160 miles). The third route starts at Mandalay, follows the railway to Lashio, then goes by cart road to Kunlong Ferry where it crosses the frontier, and thence proceeds to Tali-Hsien (200 miles). None of these routes, however, is at present more than a rough cart road, in parts suitable only for pack transport, and when they cross the Chinese frontier, they degenerate still further. As lines of military advance they could only be used by very small columns of troops. In addition the frontier region is extremely difficult. The passes are high; the country is covered in parts with thick jungle. Two great rivers, the Mekong and Salween, run through Chinese territory parallel and close to the frontier, and their deep gorges are crossed by few bridges suitable for more than pack transport. The whole province of Yunnan has only one line of railway, which runs from Yunnanfu to Hanoi, and which is therefore useless for a concentration of troops near the frontier which, at its nearest point, is 300 miles from the railway. The province of Yunnan itself is not densely populated (about 50 people to the square mile) and its communications with the rest of China are long and difficult. The probability of any serious advance being made towards the Indian Ocean on this front without a long period of preliminary preparation is therefore extremely remote.

Nevertheless, it is desirable to notice certain weaknesses in our communications. The lack of road communications would delay a concentration of force at Myitkyina, Bhamo and Lashio. Further, communications between Mandalay and Myitkyina are dependent during the rains on a single line metre gauge railway; while Bhamo, our post on one of the most important transfrontier routes, has neither through rail nor road communication with Mandalay.

*The new
Government
of Burma*

"The Burmese live in a country which geographically is quite distinct from India, and is cut off from it by sea, mountain and jungle. Its land frontiers form a practically impassable barrier, and it is invariably reached from India by sea, Rangoon being 700 miles from Calcutta, and 1,000 miles from Madras. The association of Burma with India under a single government is . . . accidental; that is to say, the former rulers of India never ruled over Burma, and Burma

was included in the charge of the Governor-General purely as a matter of administrative convenience. . . . The people of Burma are entirely different from the people of India. They come from a different stock and have a different history. Their religion, languages, social system, manners and customs, and national dress are different and they have a divergent outlook on life.”¹ Burma, therefore, was not included in the proposed Indian Federation, but has come under the Colonial Office and has had a constitution of its own since April 1st, 1937, giving it responsible government in all except certain “reserved subjects.” These reserved subjects, which consist of defence, external affairs, ecclesiastical administration, the administration of the Shan states and other “Excluded Areas,” and the whole field of monetary policy are personally administered by the Governor. Also, to secure, in the last resort, peace and tranquillity in any part of Burma, the Governor is empowered with the rights of untrammelled action in responsibility to Parliament. He is vested, also, with adequate powers to enable the King’s government to be carried on in the event of a breakdown of the constitution.

THE ARMY IN BURMA.

This separation of Burma from India necessitated certain military changes. Previously it had been an Independent Military District under Army Headquarters, India; now its forces—“the Army in Burma”—come under the control of the War Office.

These forces consist of two British battalions; the Burma Rifles, of which there are three active and one training battalions (to be increased to five active battalions); and some Indian units lent by India and paid for by Burma such as a mountain battery and a field company of Sappers and Miners. The Burma Military Police, which is officered by British officers seconded from the Indian Army, is being re-organized into six frontier battalions for watch and ward on the frontier, which will be under the Governor, and two garrison battalions under the control of the Minister responsible for Law and Order.

There are at present no Air Force units in Burma. Though

¹ Simon Commission Report, Vol I

this separation of Burma from India has taken place, it is evident that motives of economy provide strong reasons for close co-operation between the two countries in matters of defence, and that Burma is likely to lean on India for such things as schools of instruction, technical personnel, etc., for some time to come.

NOTE ON THE NATIVE STATES OF THE NORTHERN FRONTIER

Kashmir, Nepal, Sikkim and Bhutan form a buffer between India and Tibet except where the boundaries of the two countries coincide in the region of the Kumaon Hills.

- (1) *Kashmir* lies between the Indus and the Ravi and is a mountainous country intersected by high valleys of great beauty and fertility. Through it runs one of the most important routes to Tibet (*via* Ladakh), and its proximity to Russia and Tibet makes it of particular importance and interest. The Maharaja rules through his ministers, and is advised by a British Resident at Srinagar (the capital), representing the Government of India. There is also a Political Agent at Gilgit responsible for the administration of outlying petty states and another at Leh to supervise the Central Asian trade routes. The fighting forces are composed chiefly of Rajput Dogras of excellent fighting qualities.
- (2) *Nepal* is about 500 miles long, has an area of 54,000 square miles and a population of about 5 millions. It is an independent native state, the British Resident at Khatmandu taking no part in the internal administration. The Government of the country by constitutional usage is in the hands of the Prime Minister, the Sovereign or Maharaj Dhiraj being regarded as a dignified figure-head.

Nepal is the home and recruiting ground of the splendid Gurkha Infantry Regiments of the Indian Army, and has since 1816 maintained eminently friendly relations with the British Government, evidenced by the spontaneous help given during the Great War. It has an army and militia of 45,000.
- (3) *Sikkim*, north of the district of Darjeeling, forms the direct route to the famous Chumbi Valley in Tibet. It is in close relations with the Government of India, and a Political Officer at Gangtok assists and advises the Maharajah. The population consists of Bhutias, Lepchas and Nepalese.
- (4) *Bhutan*, extends for 200 miles along the southern slopes of the Himalayas, has an area of 18,000 square miles and a population of 300,000, mainly Buddhists. In 1910 the Government of India, in view of Chinese aggressions in Tibet, increased the subsidy to Bhutan to a lakh of rupees a year, and agreed not to interfere with the internal affairs of the country provided Bhutan undertook to be guided by the Government of India in regard to its external relations.

The military forces consist of local tribal levies of not much military value.

CHAPTER XX

THE TREATY OBLIGATIONS OF GREAT BRITAIN

THE British Empire, being world-wide, has contacts of some kind, political, social and economic, with every country in the world. Its prosperity is built on world trade, and any war or threat of war is likely to affect its interests adversely. Hence on the lower grounds of purely economic interest alone, apart from higher social and humanitarian motives, the British peoples throughout the world have supported the League of Nations as embodying the only permanent machinery so far devised for international co-operation, the settlement of disputes and the prevention of war. Great Britain and each of the Dominions (except Newfoundland) and India are members of the League, and as such are bound by its covenant to take their part in the maintenance of Collective Security by rendering assistance to any member against whom an act of aggression is committed by such means as they judge are within their power. Each of them, too, is a signatory of the Kellogg Pact for the renunciation of war as a means of furthering national aims and the substitution of peaceful settlement of disputes for recourse to arms. Though recent events have appeared to demonstrate the inability of both of these instruments to maintain peace as they stand at present, they are still in existence, though perhaps in a state of suspended animation, as part of the code of international relations to which Great Britain and the Dominions subscribe. Hence they are described in subsequent sections with the proviso, however, that the Covenant at least, during the next year or so, may undergo some important changes to try to renew its vitality.

Great Britain, the citadel and metropolis of the Empire, has its closest international relations with Europe. Geographically it is almost part of the continent; economically, its trade with Europe is greater than that with all the Dominions combined, in spite of high tariff barriers; strategically it is

only from Europe that the dangers of economic blockade, air attack or the severance of our sea route through the Mediterranean could come. Hence European problems of every kind, the alignment of Powers there and frictions which might lead to war are matters of the greatest importance to Great Britain. Thus Great Britain is intensely interested in problems such as the union of Austria and Germany, the Polish Corridor, the status of the Free City of Danzig, Memel, and in alignments of Powers such as the Franco-Soviet Pact and the Little Entente (Czecho-Slovakia, Jugo-Slavia and Roumania) under the wing of France, on the one side, and the existence of the so-called Berlin-Rome axis on the other. But great as are the British interests involved in all European problems, it is only in Western Europe that military obligations have been assumed. This is natural for the course of events there affects Great Britain most immediately. The maintenance of the integrity and independence of Belgium and the prevention of any great Power in Western Europe from attempting to achieve a position of complete dominance have always been keystones of British foreign policy. Hence, Great Britain, in signing the Locarno Pact of 1925, which will be described later, and, when this pact broke down ten years later, in giving temporary guarantees to France and Belgium to go to their assistance if attacked, was merely continuing a policy which will be recognized as essential to British security.

Besides the world-wide responsibilities inherent in the Covenant of the League and the European responsibilities relative at present to France and Belgium, Great Britain has treaty alliances with Iraq and Egypt, which have been described in previous chapters, devised to secure the safety of these lands and of British communications through them.

The Covenant of the League

The League of Nations is "a general association of nations . . . formed under specific covenants for the purpose of affording mutual guarantees of political independence and territorial integrity to great and small states alike." It is an international body, designed to provide pacific methods for the settlement of disputes between nations and sanctions or

THE TREATY OBLIGATIONS OF GREAT BRITAIN 385

punishments for those which refuse to be bound by its decisions. Its articles of association are contained in the Covenant, which formed Part I of the Treaties of Peace presented to Germany at Versailles and to Austria at Saint-Germain in 1919. Its members include all the self-governing parts of the British Empire, except Newfoundland, India, and all the other nations, except the United States, Germany, Brazil, Guatemala, Ecuador and Costa Rica, Japan, and the Arab States of Arabia. The organs through which it works are:—

- (a) The Assembly (or Parliament of the League), to which each member-state can send not more than three representatives, though each State has only one vote. It meets annually in September at Geneva, and is the debating body which can discuss and focus attention on any matter "within the sphere of action of the League or affecting the peace of the world."
- (b) The Council (or Cabinet of the League), which consists of the representatives of Great Britain, France, Italy and Russia respectively (which countries are permanently represented on the Council), together with ten non-permanent members elected by the Assembly for three years. It normally meets four times a year either at Geneva or some other convenient centre, but may be convened by the President at other times if necessary.
- (c) The Permanent Court of International Justice at the Hague (the Justiciary of the League), which consists of 15 judges who are elected jointly by the Council and Assembly for nine years, and who are empowered to hear disputes between nations, which are capable of legal settlement.
- (d) The Secretariat (the Civil Service of the League), which consists of a Secretary General and such secretaries and staff as may be required.

The powers and functions of the League are contained in the Articles of the Covenant, of which Articles VIII to XVIII embody the matters which are of military importance. Article VIII deals with disarmament and "recognizes that the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national

The functions of the League

safety." Article IX states that a Permanent Commission shall be constituted to advise the Council on the execution of Article VIII, and on military, naval and air questions generally. Article X is the famous guarantee clause, which reads, "The members of the League undertake to respect and preserve as against external aggression the territorial integrity and existing political independence of all members of the League. . . . In case of any such aggression or in case of any threat or danger of such aggression the Council shall advise upon the means by which this obligation shall be fulfilled." Articles XI to XV provide methods for the peaceful settlement of disputes, by arbitration, by submission to the Permanent Court of International Justice, or by inquiry and report by the Council. Article XVI recounts the sanctions or penalties against any member of the League who resorts to war in disregard of the Covenant; and Article XVII extends these obligations and penalties to the case of a dispute between a Member of the League and a State which is not a member. Articles XIX and XX give the League authority to advise alterations in treaties where they seem inconsistent with modern conditions or where their continuance might endanger the peace of the world. Article XXI affirms that international engagements for maintaining peace are not affected by the Covenant. Article XXII deals with Mandates and the control of Colonies. Article XXIII outlines the social activities for which the League made itself responsible and in which it has been a means for valuable international co-operation, *e.g.*, an international labour office to work for fair and humane conditions of labour throughout the world; suppression of white slave traffic, drug traffic and arms traffic; maintenance of freedom of transit and communications for commerce of all members of the League; the prevention and control of disease. An attempt will now be made to summarize the responsibilities incurred by Great Britain under clauses VIII to XVIII.

The Guarantee Clause

The Guarantee Clause (Article X), is the pivot, and also the most controversial section of the Covenant. At face value, it appears to involve a general guarantee of some fifty frontiers and an undertaking on the part of all members of the League to intervene in the case of the violation of any one of these frontiers. It was, in fact, so interpreted by the American

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Senate, with the result that they refused to ratify the Treaty of Versailles (of which the Covenant was part) and left the League "like an illegitimate child on the doorstep of Europe." It is still hopefully interpreted in this light by some of the smaller countries, though their optimism has been greatly modified by recent events. It is perfectly clear, however, that if this is the correct meaning of the Article, then the military commitments of Great Britain, arising from it, would be so world wide, undefined and automatic that they would include obligations to send British troops to fight in wars which involved no direct or serious British interests. Obviously, such an interpretation is not acceptable in an imperfect world where national interests are the primary consideration, and the obligations of the clause had accordingly to be watered down later.

Thus on the request of Canada, an interpretative resolution was placed before the Assembly in 1923, and though not accepted unanimously by that body (Persia dissented), had a substantial majority in favour of it, including the representatives of Great Britain, the Dominions, India, France, Italy and Japan. This resolution declared that the Council, when recommending military measures, in accordance with Article X, was bound to take account of "the geographical situation and of the special conditions of each member state" and that it was for each member state "to decide in what degree the member is bound to assure the execution of this obligation by employment of its military forces"—or briefly, that the clause could only bind those states to the extent to which they are willing to be bound by it.

The methods for the settlement of disputes instituted in Articles XI to XV are, (a) Arbitration; (b) Submission of disputes capable of legal settlement to the Permanent Court of International Justice or some other tribunal; (c) Inquiry and report by the Council of the League. All members are pledged to submit any dispute likely to lead to a rupture, which they have been unable to settle by diplomatic means, to settlement by one or other of these agencies.

With regard to the second method of settlement, Great Britain signed, in September 1929, an Optional Clause, by which she placed herself under the obligation, *vis-à-vis* those

Methods of settling disputes

The Optional Clause

other States which have also signed and ratified it, to accept the compulsory jurisdiction of the Court in all classes of legal disputes concerning the interpretation of a treaty, any question of international law, the existence of any fact which, if established, would constitute a breach of an international obligation, and the nature or extent of the reparations to be paid for the breach of an international obligation. Before signing it, she excepted the following classes of dispute :—

- (a) Disputes in regard to which the parties have agreed or shall agree to have recourse to some other method of peaceful settlement.
- (b) Disputes with the Government of any other member of the League which is a member of the British Commonwealth of Nations, all of which disputes shall be settled in such manner as the parties have agreed or shall agree.
- (c) Disputes with regard to questions which, by international law, fall exclusively within the jurisdiction of the United Kingdom.
- (d) Disputes which have been or shall be submitted to the Council.

With these reservations Great Britain, Australia, Canada, New Zealand, South Africa and India accepted the optional clause for ten years. The Irish Free State accepted it unconditionally for a period of twenty years.

*Settlement by
the Council*

Inquiry and report by the Council is the final method of settlement when all other measures have failed. If the Council's award is unanimous (apart from the representatives of the disputing parties), the Members of the League agree not to go to war with any of the parties which comply with the award. If the Council fails to reach a unanimous decision, the protagonists are free to act as they see fit, provided they wait for a cooling off period of three months before going to war, and the Members of the League can individually take such action "as they shall consider necessary for the maintenance of right and justice." Further, if the dispute is claimed by one party and is found by the Council to arise out of a matter which, by international law, is solely within the domestic jurisdiction of that party, the Council shall so report, and shall make no recommendation as to its settlement.

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In short, the final act, which may lead to the application of the sanctions enumerated in the next paragraph and which may involve serious military and naval responsibilities, is a unanimous decision (apart from the disputants) of the Council, on which Great Britain is permanently represented; and such a decision can in no case be given where the matter at issue lies within the domestic sphere of one of the disputing parties, viz., relates to questions, such as tariffs, immigration, armaments or the status of minorities, which are some of the most potent causes of ill feeling between nations. War, therefore, is not ruled out. Indeed, it is recognized as inevitable under certain circumstances; and Mr. J. M. Spaight has been able to find at least four other occasions, in addition to the above, in which war is lawful under the Covenant¹—including, of course, the inalienable right of self defence.

Article XVI of the Covenant provides for punitive measures *The penalties* to be taken against a member State which resorts to war with another member without accepting any peaceful method of settlement or in the face of a judicial decision, an arbitral award or a unanimous report of the Council. These punitive measures consist of

- (a) Financial and economic sanctions, such as embargoes on exports to or imports from the aggressor country.
- (b) Such military, naval and air measures as may be recommended by the Council.

Article XVII provides that these penalties should also be applied against any non-member State which resorts to war against a member State.

The Kellogg Pact (The Pact of Paris), August 1928

The Covenant of the League left, it has been seen, loopholes for "lawful war." In 1928, an attempt was made to close some of these by a multilateral Treaty renouncing all recourse to war as an instrument of policy or as a solution of international controversies, and agreeing that a settlement "of all disputes or conflicts, of whatever origin they may be, which may arise (between them) shall never be sought except by peaceful means." Before signing this Treaty, however, so many

¹ *Pseudo-Security* by J. M. Spaight.

qualifications and conditions were announced by various countries that its practical value as an instrument of peace must be largely discounted. Thus, the United States, its sponsor, reserved from the scope of the Treaty any matters arising out of the Monroe Doctrine: France agreed only on the understanding that the following conditions were observed:—

1. That all countries adhere to the Treaty, and that it should not come into force until universal adherence was given.
2. That each country retained the right of self defence.
3. That in case one country violated its pledge all others would automatically be released.
4. That the Pact should not interfere in any way with France's previous obligations under the Covenant of the League, the Locarno Agreements or her neutrality treaties.

All other countries, either by implication or definite statement associated themselves with France in the first three of these reservations; and the British Government while agreeing with all four of them, added a fifth:

“That there are certain regions of the world the welfare and integrity of which constitute a special and vital interest for our peace and safety. His Majesty's Government have been at pains to make it clear in the past that interference with these regions cannot be suffered. Their protection against attack is to the British Empire a measure of self defence. It must be clearly understood that his Majesty's Government in Great Britain accept the new Treaty upon the distinct understanding that it does not prejudice their freedom of action in this respect. The Government of the United States have comparable interests, any disregard of which by a foreign Power they have declared that they would regard as an unfriendly act. His Majesty's Government believe, therefore, that in defining their position they are expressing the intention and meaning of the United States Government.”

It is important to note that Canada and the Irish Free State declined to be associated with this statement of a British Monroe Doctrine, and that the U.S.S.R., Egypt and Persia, adhered to the Pact with the specific proviso that they did not recognize this British reservation.

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The limitations and weaknesses of the Pact are very obvious. No nation will ever admit that it is not fighting in self defence. The Monroe Doctrine is indefinite ; its only interpreter is the United States, and it tends to vary in scope from time to time. The undefined areas, which the British Empire claims to regard in the same light as the United States regards the area over which it declares that the Monroe Doctrine extends, probably contain Egypt, Persia and Afghanistan, three countries, whose position makes them particularly susceptible to external interference.

Further, the Treaty, while it makes the pacific settlement of disputes compulsory, sets up no machinery for their settlement and provides no penalties against a country which breaks the Pact. It is, in fact, riddled with reservations and unbuttressed by solid structure, and is merely "a sort of International Kiss," quite platonic and promising no future favours. Though all the self-governing nations of the world adhered to it, its value as a practical instrument may be gauged from the fact that it has been followed by no increase in a feeling of security throughout the world and no general decrease in armaments, nor has it prevented Japan from attacking China or Italy from attacking Abyssinia.

THE BREAKDOWN OF COLLECTIVE SECURITY

Indeed these two last-mentioned events have raised the gravest doubts about the capacity of the League system or the Kellogg Pact to stop or even delay a war on which a great Power has decided. In the case of the Sino-Japanese dispute,¹ although Japan was declared to be in the wrong, no assistance, economic or otherwise, was given to China. The scene of conflict was too far away, vital European interests were not immediately involved and it was realized, though perhaps only dimly, that economic sanctions could not be applied to Japan unless supported in the last resort by force. This latter neither Great Britain nor any other European country was prepared to contemplate. Indeed, the naval disarmament treaties and the lack of a British fleet base in the Far East would have made the application of force to Japan a practical impossibility. In these ways it was possible for League supporters to explain away the ineffectiveness of the League in this dispute.

¹ Of 1931-23.

But it was less easy to explain its ineffectiveness in the Italian-Abyssinian war. Italy, by her situation and lack of raw materials and petroleum, appeared to be a country specially susceptible to economic sanctions. Yet here, too, there was failure. The non-participation or imperfect participation of the great non-League powers, Germany, Japan and the United States, and of neighbouring League Powers, Austria and Hungary, drove an enormous gap in the economic barriers. The fear that sanctions, if pushed to extremes, as by the imposition of a petroleum embargo, would inevitably lead to a Mediterranean and perhaps a world war, for which Great Britain was unprepared owing to the post-war policy of disarmament, made the world pause. In the meantime the Abyssinian armies disintegrated under air and gas attack before those sanctions which had been imposed could have time to be effective. Thus, the world learned the lesson that Collective Security could not work unless the peace-minded Powers have the force with which to back their economic sanctions if necessary and the will to apply that force even in an issue which does not immediately concern them.

These failures of the League followed from its nature. It is not a super-state capable of imposing its will on its members. It is merely an association which recognizes the full sovereignty and independence of all the nations which compose it. It cannot usurp their sovereignty or compel its members to intervene in quarrels which do not concern them. Three great nations do not belong to it. It is merely an instrument of co-operation, providing permanent means of consultation, enquiry and mediation. It cannot prevent great Powers which are determined to fight from going to war. The most it can hope to do is to delay them, give time for reflection and make it as difficult as possible for the war to be carried on. Hence it seems likely that the League, if it is to be reanimated will be one in which sanctions and penalties, generally unworkable against a great Power, will have no place.

REGIONAL PACTS

To get its members to subordinate their own interests and even sacrifice the lives of their peoples to maintain peace throughout the world, as is essential to the full application of

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Collective Security contemplated in Article X of the League Covenant, requires a different spirit than is found in the world to-day. Hence the feeling has increasingly risen that the way to peace may be, not so much through a world wide system of Collective Security as through a system of regional pacts, designed to create a feeling of security among the nations in particular regions, "purely defensive in nature and working in close harmony with the League and under its guidance." Of these, the Western Locarno Treaty of 1925 has been the only important one in which Great Britain was involved with other great powers.

The Locarno Treaties

The Locarno Agreements of October-December 1925 comprised distinct Western and Eastern Pacts. In the first of these, which was signed by Great Britain, France, Germany, Italy and Belgium, Germany recognized as final the boundary drawn between herself and France and Belgium by the Treaty of Versailles, and agreed to observe the demilitarization of German territory for a depth of 50 kilometres east of the Rhine. Further, Germany, on the one hand, and France and Belgium, on the other, undertook not to attack or invade each other, but that they would submit disputes which arise between them to the Permanent Court of International Justice, a Conciliation Commission, or to the Council of the League. Should, however, Germany commit an unprovoked act of aggression against France or Belgium, or vice versa, then the remaining signatories would come to the assistance of the victim of the aggression, as soon as the Council of the League was satisfied that such violation or breach of the Treaty has been committed. In case of "a flagrant violation," and when "immediate action is necessary," the signatory Powers would not await the decision of the Council but would act immediately, though, even in this case, the Council would ultimately issue its decision and the Signatories would comply with it.

In the Eastern Pact, Germany concluded treaties of arbitration and conciliation with Poland and Czecho-Slovakia, but gave no undertaking that she acknowledged the permanence of their frontiers. France, in this case, was the sole guaranteeing

Power, and promised to come to their assistance (and they to the assistance of France) in case of violation of these agreements.

Put in concrete form, the Locarno Agreements meant that if Germany attacked France she would, automatically, be faced by France, Great Britain, Italy, Belgium, Poland and Czecho-Slovakia : should France attack Germany she would be faced by Great Britain, Germany, Italy and Belgium (Poland and Czecho-Slovakia presumably remaining neutral in this case). Great Britain and Italy, were involved as principals in every Western European dispute : the frontiers of Britain, from the standpoint of military obligations were moved to the Rhine ; and this country could find itself interposed as a fire curtain between Germany and France. These responsibilities were unshared by the Dominions and India, who were specifically excluded from obligations and merely gave a perfunctory approval at the Imperial Conference of 1926 " of the manner in which the negotiations had been conducted."

One obvious weakness of the Pact was the clause by which the Guaranteeing Powers might submit to the Council of the League for decision the question as to which Power committed the aggression before they take action. This might entail such delay as would enable the aggressor to be victorious. Further, no guarantee was given, by the Pact, to Great Britain. These weaknesses would have been largely removed had a proposal of February, 1935, by which *immediate* assistance would be given to *any one* of the signatory Powers attacked by air (the proposed " Air Locarno "), been put into the form of a Treaty. But unfortunately, before agreement could be reached, events intervened which destroyed (at any rate temporarily) the whole Locarno system.

In 1935, France, perturbed by German rearmament, concluded with Russia a pact of mutual assistance by which France promised to go to the assistance of Russia if that country were attacked by any European Power, and Russia gave a similar undertaking to France. This Franco-Soviet Pact was seized on by Germany as a further French effort to encircle Germany (France had similar pacts with Belgium, Czecho-Slovakia and Poland, though the last had become a little shaky owing to a more recent German-Polish rapproche.

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ment). Germany, therefore, on the grounds that she must ensure the safety of her western frontier, close to which lay her chief munition bases, proceeded to reoccupy with troops the demilitarized zone of the Rhine in violation of both the Treaty of Versailles and the Western Locarno Treaty. By the latter treaty, the guaranteeing Powers, Great Britain and Italy, could have been required by France to come to her assistance, but one guarantor, Italy, was at war and sanctions were being applied against her by Great Britain and France, while it was evident that the British people was not prepared to face a war "to eject German soldiers from German soil."

The Locarno Treaty, therefore, broke down and had been, in fact, denounced by its violator, Germany. Since then, no new treaty has replaced it, in spite of efforts by the British Government to bring the Locarno Powers together in a conference. To fill the gap, until some new agreement can be reached, Great Britain has acknowledged its responsibilities to France under the Locarno Treaty as still binding; while France and Great Britain have jointly declared that they will go to the assistance of Belgium if that country is attacked.

COMPARISON WITH 1914

It is of some interest to contrast briefly with the treaty obligations which we have incurred since the war the parallel situation in the pre-war years. Then, we were united, after almost a century of comparative isolation from European affairs, in a bond of cordial understanding with France and Russia. Though this Triple Entente did not commit us, in our own opinion, to any specific military obligations, it undoubtedly lined us up with these two Powers on the opposite side of the scales from Germany and Austria (with their uneasy hanger-on, Italy); and was, in essence, a return to the policy of maintaining the balance of power in Europe which had been supported by us throughout most of the seventeenth and eighteenth centuries. In common with many of the other Powers, we were a signatory to the Conventions of 1831 and 1839, guaranteeing the political independence and integrity of Belgium. In the Far East, we had the Anglo-Japanese Alliance which, when renewed in 1906 and 1911, had become

¹ Belgium, however, no longer undertakes a reciprocal assistance to France if she is not attacked herself.

a clear cut agreement that each would assist the other if attacked,¹ and which enabled us to disregard the Pacific as a possible theatre of war and to concentrate the bulk of our naval strength nearer home. On these, and on our Two Power Naval Standard, our policy of defence was based.

To-day, the Two Power Naval standard has disappeared under the financial strain of post-war years and the determination of the United States not to submit to it; and has been replaced by the principle that naval equality with the United States is allowable because war with the United States is inconceivable. In practice, as we have seen in an earlier chapter, it has been replaced by a system of regional supremacy, in which the United States, Great Britain and Japan are each supreme in certain areas, while in others the interaction of sea and air power makes the situation doubtful. The maintenance of the Balance of Power has become regarded as disreputable, because it failed to prevent the war, and, as far as Western Europe is concerned, was, until recently, superseded by the Western Locarno Pact, which did not line up the Powers concerned until an act of aggression had taken place. Not until then was it certain on which side Great Britain and Italy would put their weight. This Pact also replaced our pre-war obligations with regard to Belgium. At present, and pending the conclusion of some new agreement to replace the violated Western Locarno Treaty, the situation is that Great Britain has accepted obligations to go to the assistance of France and of Belgium. In the Middle East we have bilateral alliances with Iraq and Egypt which confer the benefit of assistance from those countries and impose obligations on us. As regards the Far East, the Quadruple Treaty, rather limited in scope and consultative in character, has taken the place of the very definite Anglo-Japanese Alliance with its promises of military assistance and its background of friendship. And finally, behind all these, is the League of Nations with its organization for consultation, enquiry and mediation, at present, perhaps, in a state of suspended animation; its hopes of delaying war, or, if war breaks out, of ensuring that the aggressor will be confronted by the moral disapproval and perhaps even the united economic and military strength of the other members.

¹ By more than one other power.

APPENDIX I

NOTES ON THE COMPONENT PARTS OF THE BRITISH EMPIRE

I.—The Dominions. The Dominion of Canada, the Commonwealth of Australia, the Dominion of New Zealand, the Union of South Africa, the Irish Free State, Newfoundland (constitution in abeyance since 1933).

II.—Southern Rhodesia, a Colony which possesses a responsible government in nearly all internal matters, subject to certain restrictions in the interest of the native population, but in external matters controlled by the Imperial Government. Southern Rhodesia has been represented at recent Imperial Conferences, but is not a Dominion and the Statute of Westminster does not apply to it.

III.—Ceylon, a Colony in which the executive government is carried on under the control of the Governor by a Council of State (mainly elected) which also acts as the Legislature. The departments of government are divided into ten groups, three of which groups are in charge of officials (including defence, external relations and finance). The remaining seven groups are in charge of elected members of the Council who are chairmen of Executive Committees dealing with the groups and are styled ministers. The Constitution thus bears some resemblance to the system of the London County Council and other municipal bodies in England.

IV.—Malta, a Colony which, until recently, enjoyed responsible cabinet government in local affairs, but in all questions of Imperial interest was under the Imperial government and control. This constitution was suspended in 1933 and, in 1936, was replaced for the present by one in which the government is carried on by the Governor and an Executive Council consisting mainly of officials.

V.—Colonies in which the administration is carried on by public officers under the control of the Secretary of State for the Colonies.

- (i) Colonies possessing an elected House of Assembly and nominated Legislative Council :
Bahamas, Barbados, Bermuda.
- (ii) Colonies possessing a partly elected Legislative Council, the constitution of which does not provide for an official majority :
British Guiana, Cyprus (suspended since 1931).
- (iii) Colonies possessing a partly elected Legislative Council, the constitution of which provides for, or permits, an official majority :
Fiji, Grenada, Gold Coast, Jamaica, Kenya Colony, Leeward Islands, Mauritius, Nigeria, Sierra Leone, St. Lucia, St. Vincent, Straits Settlements (Penang, Malacca, Singapore and Labuan), Trinidad and Tobago.
- (iv) Colonies possessing nominated Legislative Councils :
British Honduras, Falkland Islands, Gambia, Hong-Kong, Seychelles.

In these, except British Honduras, there is a majority of officials on the Legislative Council.

- (v) Colonies without a Legislative Council, in which the Crown has the sole power of legislation exercised through the Governor or High Commissioner :
Aden, Ashanti, Basutoland, Gibraltar, St. Helena, Gilbert and Ellice Islands.

In all these except Basutoland, Ashanti and the Gilbert and Ellice Islands there are Executive Councils to assist the Governor. Cyprus and Malta fall under this heading at present.

VI.—Protectorates.

- (i) Protectorates in which the administration is carried on by public officers under the control of the Secretary of State for the Colonies.
 - (a) Protectorates possessing a partly elected Legislative Council, the Constitution of which provides for an official majority. Nigeria (part Colony, part Protectorate), Northern Rhodesia, Sierra Leone (part Colony, part Protectorate).
 - (b) Protectorates which have nominated Legislative Councils, Nyasaland, Uganda.
 - (c) Protectorates without Legislative Councils :

Kenya Protectorate (legislated for by Legislative Council of Kenya Colony), Gambia Protectorate (legislated for by Legislative Council of Gambia, Northern territories of the Gold Coast (legislated for by the Governor of the Gold Coast), Somaliland, Bechuanaland, Swaziland.

(ii) Protected States :

(a) States possessing internal autonomy, but in external affairs controlled by the British Government :

North Borneo, Sarawak.

(b) States whose internal administration also is supervised and controlled by the British Government :
Federated and Unfederated Malay States, Brunei, Zanzibar, Tonga.

VII.—Condominiums : The Anglo-Egyptian Sudan, the New Hebrides.

VIII.—Mandated territories which are administered subject to the supervision of the League of Nations :

Palestine (legislated for at present by a High Commissioner, assisted by an Advisory Council of officials: Transjordan which was part of the Palestine mandate and subject to the supervision of the High Commissioner, but has semi-autonomous administration : Tanganyika Territory with nominated Legislative Council: British Cameroons, of which the northern parts are legislated for by the Governor of Nigeria, the Southern parts by the Governor and Legislative Council of Nigeria : British Togoland, legislated for by the Governor of the Gold Coast.

New Guinea mandated to Australia.

Western Samoa mandated to New Zealand.

Nauru mandated to the British Empire.

South-West Africa mandated to the Union of South Africa.

IX.—India comprising British India and Indian States progressing towards a Federation of self-governing provinces and states in which certain vital matters are " reserved."

X.—Burma. Local self-government, but certain vital matters are " reserved."

APPENDIX II

THE GOVERNMENTS OF THE DOMINIONS

CANADA.

The British North America Act (1867) formed the provinces of Ontario, Quebec, Nova Scotia and New Brunswick into one self-governing Dominion. Manitoba was added as a province in 1870; British Columbia in 1871; Prince Edward Island in 1873, and Saskatchewan and Alberta in 1905. There are thus nine provinces in the Dominion of Canada, as well as the Territories of the Yukon and North West, which have not yet attained the status of provinces.

The seat of Dominion Government is Ottawa.

THE CENTRAL GOVERNMENT OF THE DOMINIONS.

(1) The executive power is vested in the Crown, represented by the Governor-General, appointed by and acting on behalf of the King, who is assisted by a Committee of the Privy Council or Cabinet, formed of the principal members of the Government in power.

(2) The legislative power is vested in a Parliament consisting of the Governor-General, an Upper House—known as the Senate—and a House of Commons. There must be a session of this Parliament at least once a year. Money votes originate in the House of Commons, having first been outlined in the King's or Governor-General's address.

The use of the English and French languages is permitted in Parliament.

The Senate.

Senators are nominated by the Crown, i.e., by the Government of the day, for life, from the various Provinces. They must be over 30 years of age, natural-born or naturalized citizens, resident in the Provinces for which appointed, and possessed of a property qualification of 4,000 dollars. Bills other than money bills may be introduced in the Senate.

The House of Commons.

The members of the House of Commons are elected by ballot on a liberal franchise. There is no property qualification for members. The number allotted to each Province is based on that of Quebec, which always remains 65; the other Provinces having a proportional number according to their population at each census. The term of the Parliament is five years, unless dissolved sooner.

PROVINCIAL GOVERNMENTS.

Each Province has an elected Legislative Assembly, and in Quebec and Nova Scotia there is also a Legislative Council, or Second Chamber. The head of the executive in Provincial Governments is the Lieutenant-Governor of the Province, who is appointed by the Governor-General of the Dominion, paid by the Dominion, and holds office for five years.

THE SCOPE OF CENTRAL AND PROVINCIAL GOVERNMENTS.

The Central or Dominion Parliament has power over all matters not definitely assigned to Provincial Legislatures (compare Australian Constitution). It controls everything not of purely local interest, such as public finances, postal services, currency, defence, etc. The Provincial Governments control the matters definitely assigned to them, such as Provincial loans, local works, education, hospitals, goals, etc.

TERRITORIES.

The territories of Yukon and North West are very sparsely inhabited, and are administered by a Commissioner, Deputy Commissioner and Council of Five, appointed by the Governor-General in Council.

NEW ZEALAND.

The Colony of New Zealand became by royal proclamation, in 1907, the Dominion of New Zealand. Its Government consists of a Governor-General, as head of the executive, a Legislative Council or Upper House, and a House of Representatives. The Legislative Council consists of 35 nominated members but provision has been made for it later to consist of 40 elected European members, and not more than three Maori members, appointed by the Governor-General. The Lower House, or House of Representatives, is chosen by electors on a liberal franchise, and includes four Maori members elected by the Maori part of the population.

UNION OF SOUTH AFRICA.

The Union of South Africa was constituted under the South Africa Act (1909), and consists of the provinces known as the Cape of Good Hope Province, Natal, the Transvaal and the Orange Free State. The Executive power is in the hands of the Governor-General, and an Executive Council, of which the members are chosen and summoned by him. They are—as in the case of the British Cabinet—the principal members of the Government in power. The Legislature consists of a Senate or Upper House, and the House of Assembly. The Senate consists of 40 members, and is partly nominated and partly elected. The House of Assembly is completely elected. Members of both houses must be British subjects of European descent. The franchise is restricted to whites; natives can only be represented by Europeans and on a communal franchise only.

Pretoria is the capital and seat of Executive Government of the Union. Cape Town is the seat of the Legislature.

NEWFOUNDLAND AND LABRADOR.

The Executive Government of Newfoundland (including Labrador) consists of a Governor, assisted by a responsible Executive Council or Cabinet, over which the Governor presides. The Legislature has two houses, an Upper House or Legislative Council and a House of Assembly elected by ballot on a manhood suffrage.

This constitution is at present suspended, and the administration is carried on by a Commission consisting of 3 British and 3 local members with a British chairman.

THE COMMONWEALTH OF AUSTRALIA.

The constitution of the Commonwealth of Australia was granted by Act of Parliament, and came into force on the 1st January, 1901. It is a federation consisting of the States of New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania, to each of which great powers have been left.

THE FEDERAL GOVERNMENT.

The Central or Federal Governing body consists of :—

(1) The Governor-General, representing the Crown, assisted by a Committee or Cabinet formed of the principal members of the Government in power.

(2) A Senate to which each State, voting as a single electorate, sends six members.

(3) A House of Representatives, elected by 76 constituencies on adult suffrage. The House of Representatives must be dissolved at least each three years. The Senate can sit for six years, but half of its members must retire every three years. Money bills, cannot originate or be amended by the Senate. If the Houses disagree on any Bill and a deadlock ensues, both are dissolved. If the new Houses again disagree on the same issue, they sit in one session, and a clear majority of the total number of both Houses decides.

THE POWERS OF THE FEDERAL GOVERNMENT.

The Federal or Commonwealth Government deals with all matters relating to the world outside, or to more than one State, such as defence, foreign policy, postal services, railways, communication, and inter-State commerce. There is a definite list of these matters and all subjects not mentioned therein are under the control of the State Governments. The result is that the various States have a large "residuary" power left to them.

STATE GOVERNMENTS.

The government of a State consist of .—

(1) The Governor, appointed by the Crown

(2) A Legislative Council, nominated for life in New South Wales ; elected in the other States, except in Queensland, where it was abolished in 1922.

(3) A Legislative Assembly, elected by the votes of all adult residents, who are natural born or naturalized citizens.

THE TERRITORIES AND MANDATES.

The Territories, i.e., the Northern Territory, Norfolk Island and Papua, and the mandates given to the Commonwealth, are administered by the Federal Government.

THE IRISH FREE STATE. (EIRE)

The constitution of the Irish Free State (Saorstát Eireann) which consists of the 26 counties of "Southern Ireland" was sanctioned by the Irish Free State Constitution Act (Dec. 1922). In this act were embodied the general principles arrived at in the Treaty between the British Government and Southern Ireland (Dec. 1921), and also the constitution recommended by a provisional Parliament of Southern Ireland which met in September, 1922.

The chief principles referred to are as follows :—

- (1) Southern Ireland to have the same constitutional status as the other self-governing Dominions.
- (2) Its position in relation to the Imperial Parliament and Government to be that of the Dominion of Canada.
- (3) The Irish Free State to undertake its own coast defence, but the defence by sea to be undertaken by the Imperial Forces, this provision to be reviewed at the end of five years.¹ The Irish Free

¹ No alteration has been made in this up to the present.

State to afford in time of war or strained relations with other powers such harbour or other facilities as may be necessary. The Irish Defence Force not to exceed such proportion to the Military Forces of Great Britain as the proportion which exists between the population of the two countries. The Irish Free State to be free to establish wireless stations and submarine cables only with the approval of the British Government, and the latter to be free to land additional cables or erect further wireless stations if found desirable.

The Government consists of

- (a) An elected head of the State.
- (b) A Legislature (Oireachtas) consisting of the Chamber of Deputies (Dáil Eireann) and an upper house

The *Dáil* is elected on the principle of proportional representation by all citizens of 21 and over. The number of deputies is fixed on a population basis, and its normal life is four years.

The Cabinet, known as the *Executive Council* (Aireacht) consists of not more than twelve nor less than five ministers, of whom one is the President (i.e., the Prime Minister). The President is nominated by the *Dáil* and he in turn nominates the other members of the council whose appointment must, however, be approved by the *Dáil*. The *Dáil* may also nominate other ministers, without seats on the council, but the total number of ministers in all must not exceed twelve.

NORTHERN IRELAND.

By the Government of Ireland Act (1920) as amended by the Irish Free State Act (1922) a separate Government was established for "Northern Ireland" which consists of Antrim, Armagh, Down, Fermanagh, Londonderry and Tyrone and the Parliamentary Boroughs of Londonderry and Belfast.

The Government consists of :

- (1) A Governor appointed by the Crown for six years.
- (2) A Senate of 24 elected members together with the Lord Mayors of Belfast and Londonderry.
- (3) A House of Commons of 52 members
- (4) A Cabinet system similar to that of Great Britain and the Dominions. The Parliament of Northern Ireland has not power over :—
- (a) Matters of Imperial concern
- (b) "Reserved matters," e.g., Postal Service, Post Office and Trustee Savings Banks, designs for stamps, registration of deeds, land purchase.

Northern Ireland continues to send 13 members to the British House of Commons, and so cannot be regarded as a Dominion. The Home Office is the usual channel of communication between the British Government and the Government of Northern Ireland.

INDIA.

The Government of India Act (1935) has the following as its salient features :—

- (a) The eleven Provinces, Madras, Bombay, Bengal, the United Provinces, the Punjab, Bihar, the Central Provinces and Berar, Assam, the North West Frontier Province, Orissa and Sind to be self-governing in those matters which are entrusted to them by the Act.
- (b) These Provinces and those Indian States which are willing are to form a Federation of India. This Federation will not come into

existence until Rulers of States representing not less than half the aggregate population of the States and entitled to not less than half the seats to be allotted to the States in the Federal Upper Chamber have signified their desire to accede to the Federation.

(c) Burma not to be part of the Federation

The Federal Government will consist of a Governor-General, advised and aided by a Council of Ministers (not exceeding ten) responsible to a Federal Legislature consisting of a Council of State and a House of Assembly. Both Houses will comprise elected members from the Provinces and members appointed by the Ruling Princes. Election to the Upper House (the Council of State) will be direct, on a high franchise basis; election to the House of Assembly will be indirect, the members being elected in the main by the Provincial Assemblies.

The Governor-General will be personally responsible for and administer Defence, Ecclesiastical affairs, Foreign Relations (excluding the relations with any part of His Majesty's dominions) and certain tribal areas.

He will also have a "special responsibility" with regard to the following matters, in which he can act as he deems requisite, notwithstanding the advice of his ministers:—(1) The prevention of any grave menace to the peace or tranquillity of India or any part thereof. (2) The safeguarding of the financial stability and credit of the Federal Government. (3) The safeguarding of the legitimate interests of minorities. (4) The securing of their rights to the Public Services (e.g. pensions, etc.). (5) The securing in the sphere of executive action of the purposes which the provisions dealing with discrimination against British subjects are designed to secure. (6) The prevention of action which would subject goods of United Kingdom or Burmese origin to discriminatory or penal treatment. (7) The protection of the rights of any Indian State. (8) The securing that the due discharge of his functions with respect to matters under his control or at his discretion is not prejudiced or impeded by any course of action taken with respect to any other matter. The Governor-General will have the following powers. (1) He may give or withhold assent to a Bill or reserve it for the signification of His Majesty's pleasure. (2) He may in certain cases summon a joint sitting of the two Houses. (3) He may issue ordinances during a recess of the Legislature. (4) He can, without consulting the Legislature, under certain circumstances enact a "Governor-General's Act," but such measures must be laid before the British Parliament by the Secretary of State.

Expenditure on Defence, Pensions, External Affairs, Debt Charges, the salary and allowances of the Governor-General, ministers, counselors, judges of the Federal Court and sums arising out of the discharge of the "special responsibilities" are not to be submitted to the vote of the Legislature.

In each of the eleven Governors' Provinces the Governor (appointed by the Crown and responsible to the Governor-General) is aided and advised by a Council of Ministers responsible to a Provincial Legislature of one or two chambers. The Governors have "special responsibilities" similar to those of the Governor-General, but within the narrower limits of his own Province and omitting those numbered (2), (6) and (8). The part of the Act referring to the Provincial Governments and the separation of Burma from India came into operation on April 1st, 1937.

The Chief Commissioners' Provinces are administered by the Governor-General acting through Chief Commissioners. British Baluchistan, Delhi, Ajmer-Merwara, Coorg, The Andaman and Nicobar Islands, the area known as Panth Piploda. Aden has ceased to be part of India and is now administered by the Colonial Office.

The following quotation from the "Instruments of Instructions to

the Governor-General and Governors is of interest in relation to defence. The Governor-General is instructed to "bear in mind the desirability of ascertaining the views of his Ministers when he shall have occasion to consider matters relating to the general policy of appointing Indian officers to Our Indian Forces or the employment of Our Indian Forces on service outside India "

(ii) To obtain the views of the Commander-in-Chief on any matter affecting the discharge of the latter's duties and to transmit these views to the Secretary of State at the Commander-in-Chief's request.

(iii) That, although the financial control of Defence must be exercised by the Governor-General at his discretion, the Federal Department of Finance shall be consulted and kept informed before estimates are settled."

APPENDIX III

THE WHITE PAPER ON DEFENCE (MARCH 3RD, 1936)

The anxieties arising out of the Italo-Abyssinian War, the breakdown of collective security, and the re-arming of Germany tended more and more to concentrate attention on our foreign policy and defence from the latter part of 1935 onwards. Not merely was it felt that collective security could not function without adequate force at its disposal in the last resort, but also the situation in the Mediterranean, where our fleet had had to move from Malta to Alexandria, had raised apprehensions regarding the security of the Mediterranean and Red Sea route. The large Italian forces in Libya added another element to the situation and the garrison of Egypt was hastily reinforced. War, if it came as a result of sanctions, it was felt, would find us unprepared owing to the lead which we had taken (and which no nation had followed) in disarmament, and even Great Britain itself was insufficiently protected against sudden air attack.

On March 3rd, 1936, the Government issued a White Paper on Defence which announced its programme for putting our defences in order. The main features were as follows :—

- I. *Naval*: After the expiration of the London Naval Treaty on December 31st, 1936, 2 new capital ships to be laid down. Meanwhile existing battleships are to be modernized (e.g., for anti-aircraft defence, etc.). The number of cruisers to be increased eventually to 70 of which 60 would be under-age. As an instalment towards this, 7 to be laid down in 1936–37.

Two aircraft carriers and a steady replacement programme in destroyers and submarines.

The Fleet Air Arm to be expanded.

- II. *Army*: Four new battalions to be raised to restore the balance in the Cardwell system of reliefs which had been upset by the “axeing” of 21 battalions in 1922.

Mechanization to be speeded up.

Coast defences at home and abroad to be modernized.

Anti-aircraft defence in the south-east of England and also to cover the important industrial areas in the Midlands and north to be accelerated.

- III. *Air*: The 1935 programme had been designed to bring the force at home up to a first line strength of 1,500 machines. This is to be increased to 1,750 machines, exclusive of the Fleet Air Arm. Also 4 new auxiliary squadrons to be raised for co-operation with the Territorial Army, and the five regular A.C. Squadrons to be raised to seven. The number of air units located at strategic points on our air routes abroad to be increased by 12 squadrons.

Adequate reserves of men and material are necessary and particular attention to be given to these.

The Air Raid Precautions Department of the Home Office is now putting into operation the plans which it has been preparing for some years.

- IV. *Industrial*: The policy to be adopted is "To ensure the fullest and most effective use of the industrial capacity and the manpower available for production of material in the country." Large reserves of munitions and equipment were unsatisfactory because of the cost and also because they would rapidly go out of date. Industry must, therefore, be organized so that it can rapidly change over at the vital points from commercial to war production should the necessity arise. The Government factories, however, are responsible for a specialized kind of output which is generally non-existent elsewhere. "This includes the production of explosives and propellants, the filling of shells and cartridges and the manufacture of fuzes, bombs, mines and torpedoes. To meet present requirements in these it will be necessary to extend and duplicate existing Government factories, and both *vulnerability of site*¹ and the needs of the special areas will receive consideration."

¹ Later it was announced that the Royal Filling Factory at Woolwich would be transferred in part to sites in Lancashire, South Wales and Scotland, and new filling factories would be erected in Hereford and Nottinghamshire.

Further, the field of supply will be extended to firms not normally engaged in armament work, and particularly in regard to production of aircraft. Arrangements will be made with these firms for the laying down of the necessary plant, and sufficient orders will be guaranteed to allow for the requisite training in the work of production.

THE WHITE PAPER ON DEFENCE (FEBRUARY 16TH, 1937)

This was issued in explanation of the government's proposal to borrow £400 millions for defence purposes.

Naval: The programme for 1937-8 will include 3 new battleships, 7 cruisers, 2 aircraft carriers and a substantial increase of the Fleet Air Arm. (These are, of course, in addition to those laid down by the 1936-37 programme.)

Army: Modernized equipment; accelerated mechanization; building up of ammunition reserves; expenditure on better barracks; formation in near future of two of the four new infantry battalions (mentioned in the White Paper of 1936) and one of two new tank battalions.

Royal Air Force: Completion of programme of new aerodromes and squadrons.

Supplies

The measures briefly referred to in the preceding paragraphs would not, however, suffice to meet the needs of the Defence Services, unless adequate preparations were made in peace time to ensure a sufficient supply of munitions and stores in time of emergency.

For this reason, steps are being taken to build up what has come to be known as a "war potential." Thus, in the aircraft industry, over and above the expansion of the capacity of the existing aircraft firms, steps have been taken to build "shadow" aircraft factories.

These factories will be available in any emergency to provide aircraft in large quantities, and since they will be used in the first instance to supply aircraft required for the expansion scheme, the engineering firms who are co-operating in the scheme will thereby gain invaluable experience in the technique of aircraft manufacture.

The same principle is being adopted in regard to the supply of other types of munitions. Extensions of plant are being

laid down by firms not normally engaged in the production of munitions, and the orders placed with these firms fulfil the double purpose of making good existing deficiencies, and of providing means for the rapid expansion of output in war time.

These extensions of capacity are being made under arrangements which ensure their retention over a period of years, after the existing orders have been completed, in a form capable of rapid turnover to munitions in the event of emergency.

In making plans for the industrial resources required by the Forces it is necessary to have regard to the risks of air attack. Steps have been requisite in various instances to ensure that sources of essential supplies are sufficiently dispersed, and in some cases a degree of duplication of essential services is necessary even at the cost of some increase in expenditure.

A number of new Government factories for the manufacture of explosives, and for the filling of shells and bombs, are being built or planned. These factories present in part the removal to safer localities of existing establishments, and in part the additions required to bring capacity up to the increased needs of the three Services.

Steps are also being taken to see that national establishments and industries, vital to the Defence Services, are not paralysed by the shortage of certain essential raw materials. The accumulation of essential reserves for these and other purposes is in hand, and will of course involve very substantial expenditure.

The provision of adequate supplies of fuel of the types required by each of the three Services and for civilian needs, as well as their protection and replenishment in the event of war, have received special consideration.

The needs of home defence now require a number of specific measures, each of much importance. Foremost among these is the provision of anti-aircraft defence.

Two divisions of the Territorial Army have been re-formed and greatly expanded for this essential service, and further expansion is to take place during the forthcoming year. This expansion involves the provision of new Territorial Army headquarters in many districts hitherto largely unrecruited, in addition to the modernization and in some instances entire replacement of existing drill halls.

New and more efficient types of guns are being manufactured,

together with large numbers of searchlights and other equipment, and reserves of ammunition are being accumulated. Balloons and equipment for balloon barrages are being manufactured. Plans are being made to ensure that the organization for air defence will be readily adaptable to meet whatever type of air attack this country might be called upon to face.

Among arrangements for the protection of the civil population against air raids, stocks of respirators and other equipment are being accumulated to provide against the contingency of gas attack.

The preparation of local schemes of air raid precautions and the organization of the necessary personnel for air raid services are now being undertaken on an increasing scale throughout the country.

His Majesty's Government have undertaken to provide instruction of the police and other personnel so as to make them capable of acting as instructors in anti-gas measures in their own areas. One anti-gas school has been in operation for almost a year and in order to cope with increasing requirements in this respect a second school is now being established.

The fire risks from incendiary bombs dropped from aeroplanes present a problem which is beyond the capacity of normal peace-time fire brigade organizations. Arrangements are being planned to accumulate the additional fire-fighting appliances required to meet this risk, and to train reserve personnel.

*Anti-Aircraft
Defences*

The defences of our overseas bases also require additions to meet the menace of attack from the air and increased protection will be provided at important ports abroad in the form of anti-aircraft batteries and searchlights. In addition, the modernization of coast defences at home and abroad will involve considerable expenditure.

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